

CLASS
DATA
RECORDER

SCOTT,
FORESMAN
SCHOOL
MANAGEMENT
APPLICATIONS

Developed by ESI, Inc.
St. Paul, Minnesota

NOTE: This is an incomplete preliminary version of the
Class Data Recorder Reference Manual.

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This Scott, Foresman *School Management Application* module is designed for use with the Texas Instruments 99/4 microcomputer. A disk controller, two disk drives for 5¼-inch diskettes, an RS-232 interface, and a printer must be used with this module.

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Part 2: Using *Class Data Recorder*

How This Application Can Help You

Class Data Recorder is designed to aid you, the classroom teacher, by providing an easy means of maintaining and analyzing the scores earned by a student on tests, reports, and other assignments. The application can also help you communicate individual or class progress to students, parents, counselors, and administrators. Once the appropriate data have been entered, the computer automatically performs the calculations that can provide up-to-date scores expressed in raw scores, percentages, and letter grades.

Important: Even though *Class Data Recorder* requires only one diskette, you should keep a backup since essential data will be stored on the diskette. Information on how to copy a diskette using your *Disk Manager* is in Part 1, "Backing Up Diskettes."

Diskette Data Limits

Each diskette you use for *Class Data Recorder* can store information for a single class of up to forty students for as many as four marking periods. You can enter the scores of up to forty assignments for each student during each marking period. These scores can be numeric or simply pass/fail and can be weighted according to the importance of the assignment. If you designate grade intervals or *gradelines* for an assignment, the computer will automatically assign a student's letter grade for that assignment.

The Main Procedures

There are essentially seven steps in using *Class Data Recorder*:

1. You must first create a class record by entering the necessary course information and the names of the students in your class.
2. An alphabetical roster should then be printed showing each student's computer-assigned record number. This step is necessary because you will need to know a student's record number when retrieving his or her records.
3. A description of each assignment needs to be entered. This description includes the assignment's name, total points, weight (if any), and whether or not it is pass/fail.

4. The student's scores need to be entered for each assignment.

5. If you wish the computer to calculate letter grades for an assignment, the *gradelines* must be recorded.

6. The computer analyzes and then organizes this information to produce any of seven reports you select.

7. At the end of a marking period, a final grade may be assigned for each student's work.

Each of these operations can be done by selecting one of the options from the *menus* (lists of options) provided throughout the application. The flow chart on pages 58-60 gives you an overview of each of these operations.

Weighting Assignments

The *Class Data Recorder* allows you to designate a weight for each assignment. A student's percentage score for an assignment will be multiplied by that particular weight. Thus, when several scores are combined and averaged, an assignment with a substantial weight will have a greater influence on the cumulative average than an assignment with little or no weight. See page 00 for more information on weighting assignments.

If you choose not to use the weighting option, the scores will be expressed as percentages of the total number of correct items.

Pass/Fail Assignments

You also have the option of designating an assignment as pass/fail. The pass/fail option is intended to be used with assignments which are not as critical as tests, quizzes, and projects, yet which are necessary for accurately determining a student's grade. These might include assignments such as daily homework or class participation. Instead of assigning a line at which students either pass or fail an assignment, you only need to enter the total points for completing the assignment. Then when you enter the scores for each student, you only need to enter a *P* for those who completed the assignment, and an *F* for those who did not. Those students who receive a *P* will be awarded all the total points, and those who receive

an *F* will be given no points for the assignment.

Pass/fail assignments *cannot* be changed to non-pass/fail assignments. If an assignment is not designated as pass/fail, you can then assign gradelines so that students will receive letter grades of *A, B, C, D, or F*.

The *Class Data Recorder* Reports

You can produce seven different reports with this application: Report 1, "Class List"; Report 2, "Assignment Summary"; Report 3, "Individual Student Summary"; Report 4, "Cumulative Class Averages"; Report 5, "Class Averages by Assignment"; Report 6, "Rank List"; and Report 7, "Histogram." Each of these reports is described briefly below.

Report 1 is an alphabetical roster of the members of your class showing each student's computer-assigned record number. You can use the blank grid, which is also included on the report, to keep a written record of attendance, class participation, or appointments. This report should be printed before choosing any other option so that you have a copy of each student's record number.

Report 2 is a summary of each student's performance on a specific assignment. Once you have designated the desired assignment, the report displays each student's scores in terms of raw score, percentage, and letter grade (if gradelines were designated).

Report 3 summarizes an individual student's progress for every assignment to date. The report will show you, assignment by assignment, the total points possible, and a student's raw score, percentage, and grade (if gradelines were assigned). A cumulative weighted percentage is also included if the weighted option was chosen.

Report 4 includes each student's average based on all the scores, and the weight of each assignment (if the weighting option is used). After the final grade for the term is entered, it will also appear on this report.

Report 5 is a summary of the performance of your entire class on any one assignment. This report displays the selected assignment's weight (if used), total points, raw average, raw range, and the class average (by percent).

Report 6 ranks the students according to their cumulative weighted percentage of assignment scores or the percentage of the total points if the weighting option is not used.

Report 7 is a *histogram*. A histogram is a graphic illustration of how frequently the students in your class score within a specified range. You

can use this report to determine a curve for grading.

Two types of histograms are illustrated on page 00—CUMULATIVE ACHIEVEMENT by percentages and INDIVIDUAL ASSIGNMENT by raw scores.

The following pages illustrate two of the *Class Data Recorder* reports, the "Assignment Summary," and the "Cumulative Class Averages."

09/28/82

*** ASSIGNMENT SUMMARY ***
#4 POETRY TEST

ENGLISH 1
MR. LEWIS

PERIOD 3
FALL QUARTER

RECORD	NAME	RAW SCORE	% SCORE	GRADE
2	ANDERSON, MARGARET	48	96	A
3	BALDWIN, EUGENE	50	100	A
1	CARTER, DENISE	40	80	B
6	CHANG, DENNIS	43	86	B
15	EDGERTON, DAVID	50	100	A
8	ENGSTROM, THOMAS	39	78	C
7	FERRARA, DOMINICK	36	72	C
10	GUTIERREZ, CARMEN	47	94	A
11	JEFFERSON, WALTER	46	92	A
4	LLOYD, JOHN	44	88	B
14	MOSKOWITZ, EILEEN	39	78	C
13	NAGUCHI, JANET	41	82	B
12	O'HARA, KATHRYN	42	84	B
9	SANTIAGO, FELIPE	50	100	A
5	WALKER, SARA	44	88	B

CLASS AVERAGE: 43.9 POINTS 88%
POSSIBLE SCORE: 50 POINTS
WEIGHT: 8
A-LINE: 45 B-LINE: 40 C-LINE: 35 D-LINE: 30

*** INDICATES THE ITEM IS MISSING.

11/12/82

*** CUMULATIVE CLASS AVERAGES ***
AVERAGES COMPUTED THROUGH ASSIGNMENT 10

ENGLISH 1
MR. LEWIS

PERIOD 3
FALL QUARTER

RECORD	NAME	WEIGHTED PERCENTAGE	FINAL GRADE
2	ANDERSON, MARGARET	85	B
3	BALDWIN, EUGENE	93***	--
1	CARTER, DENISE	90	A-
6	CHANG, DENNIS	89	B+
15	EDGERTON, DAVID	92	A-
8	ENGSTROM, THOMAS	81	B-
7	FERRARA, DOMINICK	74	C
10	GUTIERREZ, CARMEN	86	B
11	JEFFERSON, WALTER	88***	--
4	LLOYD, JOHN	81	B-
14	MOSKOWITZ, EILEEN	78***	--
13	NAGUCHI, JANET	85	B
12	O'HARA, KATHRYN	81	B-
9	SANTIAGO, FELIPE	82	B-
5	WALKER, SARA	84	B

*** INDICATES AN ITEM WAS MISSING WHEN DOING THE CALCULATIONS.

General Operating Procedures

Preliminary Checks

If the system is not already turned on, and especially if any components have recently been disconnected, you should first:

1. Check that all units are properly connected.

Important: If the adapter board on the flat cable of either disk drive has been connected upside down to the disk controller or the other drive's adapter board plug (see Part 1, page 8), *your diskettes will be completely erased as soon as you turn on power and insert them.* Therefore, before inserting a diskette, switch on the whole system and look at both disk drive lights. If the cables are properly connected, they should *not* glow. If the light on either drive comes on and remains shining, that drive's adapter board is plugged in upside down. Switch off all units, unplug that cable, and reconnect it the other way.

Do not insert diskettes until you have again turned on the system and made certain that the lights are not glowing.

2. In switching on the system, remember to turn on the disk controller and disk drives before the console.

3. To avoid the risk of stalling the program when you select a report, make certain that the RS-232 interface is on, with the painted red dot completely uncovered by the switch. Also doublecheck that the printer interface cable is firmly plugged into both the printer's interface connector and the port on the back of the RS-232 interface *next to* that unit's power cord.

4. Check also that the printer's LINE/LCL switch is set to LINE.

Inserting Module and Diskettes

Now you are ready to insert the command module all the way into the console port, and to place an *initialized* diskette or diskettes for this application into the appropriate disk drive or drives. If this is a two-diskette application, make sure that the diskette marked for DRIVE 1 goes into that drive, and the diskette for DRIVE 2 goes into the other drive.

(Occasionally, inserting a module may produce an abnormal, garbled monitor display. If this occurs, simply switch the console off, then on again. This will reset it.)

If you do not yet have initialized diskettes for this application and do not know how to initialize a diskette, see pages 18-19 in Part 1. As soon as the diskettes are initialized, label each one, identifying clearly what information will be

recorded on it and the number of the drive to which it is assigned. If you are using diskettes that already hold data for this application, check the labels to be sure that you have the right diskettes, and that you are putting each one in its proper disk drive.

The monitor is now displaying the Texas Instruments preliminary title screen with the message: READY—PRESS ANY KEY TO BEGIN. Do so to make the preliminary program selection menu appear, and press the number displayed beside the title of this application. The computer will first display the *School Management Applications* title screen, followed by the title screen for the application. Next, the screen will briefly flash from blue to green and back to blue, and you will see the message: DISK CHECK. The disk drive lights should go on alternately as each diskette is tested, and if all is in order, you will next see the first input display. However, if the disk check had uncovered any problems, you would see this display:

```
          DISK ERROR
PLEASE CHECK THE FOLLOWING:
  1 ALL POWER TURNED ON
  2 ALL CABLES CONNECTED
  3 DISK DRIVE DOOR CLOSED
  4 INITIALIZED DISKETTE OR
    DISKETTE FOR THIS
    APPLICATION IN THE DISK
    DRIVE
PRESS ANY KEY WHEN READY
```

If you need guidance in performing these checks, consult "Disk System Checks" and "Testing Diskettes" in Part 1. If you had inserted the wrong diskettes, or put the diskettes in the wrong drives, you would instead get this message: WRONG DISKETTE IN DRIVE 1 or DRIVE 2.

Special Function Keys

To help you in recognizing the special keys, you should place on the keyboard the black overlay that came in the carton with your TI 99/4 computer.

In *School Management Applications*, information is typed into blank *data fields* that appear as white blocks on the display. You can move the cursor *within* a given field one space to the left using the

← arrow key, or one space to the right using the → arrow key (see the keyboard overlay). Also *within* a data field, you can use the ERASE function key to erase that field only. Similarly, the key labeled DEL on the overlay can be used to delete one character, while the key labeled INS can be used to insert one or more characters, starting from the point where you position the cursor before activating the INS function.

The QUIT function can return you to the preliminary Texas Instruments screen, but it should not be used freely as recommended in Texas Instruments manuals.

Important: This function should never be used with a *School Management Application*, especially not when a disk drive light is shining (see the caution in "Special Command Keys," page 14). Although Texas Instruments advises the use of QUIT to terminate programs, with the *School Management* modules this command may sometimes halt a program abruptly without proper closing of diskette files. As a result, some or even all of the data on a diskette could be erased, and the diskette might have to be initialized again and completely recreated. The effect would be analogous to the dropping of a file drawer, with folders scattered all over the office floor.

Instead of QUIT, the E key should *always* be used to terminate an application, as explained in "Changing Modules" below.

Signal Tones

If you hear a single high-pitched tone about a second long as you press ENTER, it means you have tried to enter invalid data. For instance, you may have typed a letter in a field reserved strictly for numbers; or you may have input a number larger than the application is programmed to accept in a certain field. You will also hear this warning tone if you neglect to enter any data in a field where some entry is required for the application to work.

When you have already reached the last position in a data field, and type yet another character before pressing ENTER, you will hear a shorter, much lower tone. This signals that you have just overwritten and therefore changed the last character in that data field. If you intended to alter that character, there is no error.

Entering Data

It is essential to observe the maximum length of each field; otherwise you may type characters that will not be stored by the computer. To help you remember these length limits, the maximum

number of characters a field can accept is given in boldface following the first reference to each field. If a certain field can accept only letters or only numbers, this is also specified.

If this is your first experience using this module, you should practice entering data as you read the instructions. You should also make some deliberate errors to accustom yourself to the signal tones and the use of the editing keys. Remember that you cannot hurt either the machines or your module by pressing the "wrong" keys.

Correcting Input Errors

When the cursor reaches ANY CHANGES? at the bottom right of any display, you should proofread your data carefully. If there are errors, type Y or YES and press ENTER. The cursor will return to the start of the display. *You need not retype every field.* If an entire field is correct, press ENTER to confirm it to the computer; the cursor will move to the next field. When it reaches a field with an error, use the ← and → arrow keys identified on the keyboard overlay to move the cursor to the error. Then you can either retype the rest of the field from that point or simply use the appropriate editing keys to change it. If you prefer, you can use the ERASE function key to erase the entire field, then type in the new data. Once an error is corrected, you need not continue typing to the end of the field; simply press ENTER, and the computer will register the revised data.

When the data on the screen are correct, type N or NO following ANY CHANGES?, and then press ENTER. The displayed data will then be recorded on diskette and the next display in the application will appear.

Changing Modules

When finished working with this application, you should use the following procedure to end the program and, if necessary, to start another one:

1. Return to the application's main menu and enter E to end the program (see page 40).
2. Back up new data, if changes have been made, and remove and file your diskettes as suggested on the application's final display.
3. Press any key to bring back the preliminary Texas Instruments display.
4. Remove the command module.
5. If you wish to use another application, insert that module and the appropriate diskette or diskettes and continue work.

Beginning a Work Session

Entering the Date

At the start of each work session, the following screen will appear:

```
CLASS DATA RECORDER

TODAY'S DATE //

ANY CHANGES? 
```

If the diskette has been used previously, the date of the last work session will be displayed on the screen. However, if you are using a newly initialized diskette, the DATE fields will be blank. The cursor will flash at the beginning of the MONTH field, which is the first of the three DATE fields (2 spaces each; numbers only) that follow TODAY'S DATE.

You must enter the date in three steps as month/day/year, pressing ENTER after each part. Dates with only one digit, such as 1/4/82, may be typed either as:

01(ENTER)/
04(ENTER)/
82(ENTER)

or as:

1(ENTER)/
4(ENTER)/
82(ENTER)

Each time you press ENTER, the cursor will move to the next section of the date. To hear the invalid data tone, try pressing the ENTER key when the cursor is in a blank DATE field; *the application will not accept a blank date.* The date of this work session is stored and printed at the head of all reports until a new date is entered at the start of another work session.

Important: In *School Management* manuals, when a data field on a screen is surrounded by a black rule, as are the DATE fields above, you cannot pass through that field without entering at least one character.

Once you have entered the date for the *first time* on this diskette, the query ANY CHANGES? will appear next at the bottom right of the screen with the cursor flashing in a field of 3 spaces. However, if the diskette has been used previously, the query ANY CHANGES? will come up with the stored date. In either case, you should proofread the screen, and if you wish to change the date, type Y or YES in response to ANY CHANGES? and press ENTER. The cursor will return to the start of the MONTH field. Use the editing keys to make your changes as already explained in "Correcting Input Errors." When the date is correct, type N or NO in response to ANY CHANGES?

Creating a Class Record

When beginning a work session with a newly initialized diskette, you must create a class record after entering the date. A class record is created by entering course information and the names of the students in your class. Once this information has been recorded, it will be used for subsequent work sessions.

Entering Course Data As soon as the date has been recorded the following screen will appear:

```
COURSE DATA

COURSE TITLE _____
ENGLISH I

PERIOD OF THE DAY
3

TERM OF THE SCHOOL YEAR
FALL QUARTER

TEACHER NAME
MR. LEWIS

WILL ASSIGNMENTS BE WEIGHTED?
YES

ANY CHANGES? 
```

On this screen you should enter:
COURSE TITLE: 20 spaces; any characters
PERIOD OF THE DAY: 2 spaces; any characters
TERM OF THE SCHOOL YEAR: 15 spaces; any characters
TEACHER NAME: 15 spaces; any characters

The question WILL ASSIGNMENTS BE WEIGHTED? also appears on the COURSE DATA screen. If you reply Y or YES, you will be able to designate a *weight* for each assignment. A student's score for an assignment will be multiplied

by that particular number. Thus, when several scores are combined and averaged, an assignment with a substantial weight will have a greater influence on the cumulative average than an assignment with little or no weight. See page 00 for more information on weighting assignments.

After you have entered all the data, the query ANY CHANGES? will appear. Proofread your entries carefully. If there are errors, type Y or YES and press ENTER. This will cause the cursor to return to the start of the display. Then, using the editing keys, you can make any necessary changes.

Important: It is essential to check your COURSE DATA entries carefully since it is not possible to alter any of the basic course description once it has been recorded without destroying all the data stored on the diskette.

When the data on the screen are correct type N or NO in reply to ANY CHANGES? and press ENTER.

Entering a Class List If you are using a newly initialized diskette, you will be asked to enter a class list. The computer will automatically assign record numbers (beginning with number 1) as the students' names are entered. The following screen will be displayed to allow you to enter each student's name.

FALL QUARTER PERIOD 3

ENTER NAMES (LAST, FIRST)

TYPE "END" WHEN FINISHED.

1

ANY CHANGES?

To enter a student's name in the NAME field of 23 spaces, type the last name, a comma, first name or initial, and then press ENTER.

Important: A comma must be inserted between the last name and the first. If it is omitted, the message PLEASE INSERT A COMMA will flash below the NAME field and an error tone will sound. The cursor will then return to the beginning of the NAME field. The comma is

necessary for the the computer to distinguish between the student's last name and first name for the purpose of alphabetizing.

After you enter a name, the query ANY CHANGES? will appear. If you answer Y or YES the cursor will return to the start of the NAME field, enabling you to make the correction using the editing keys. When you answer N or NO, the next record number in sequence will appear followed by another blank NAME field.

Important: It is not necessary to enter the names in alphabetical order. The computer will automatically alphabetize them as they are entered on the diskette.

Up to forty names can be recorded on a diskette in this way. When the record number 40 appears with a blank NAME field, the message THIS IS YOUR LAST STUDENT will flash below it. After you enter the fortieth student's name, the main menu will automatically appear.

Important: The computer will assign each student name a record number as it is entered. You will use this record number when calling up the data stored for a particular student in order to edit information or to print a report summarizing the student's progress. Therefore, it is essential to have an up-to-date "Class List" (Report 1) available. Information on printing a "Class List" is on page 47.

When you have finished entering the names of your students, type END in the NAME field and press ENTER. You could also stop this routine by answering E or END to ANY CHANGES? after entering the name of your last student. Now the main menu for *Class Data Recorder* will appear (in the next section) and you may choose to enter assignment data or print reports.

Selecting a Term

When beginning a work session with a diskette that has already been used with this application, you can either select a term previously entered, or enter a new term. If you need to enter assignments or produce reports from a past or current term, enter the appropriate number from the list of options illustrated by the following screen:

CLASS DATA RECORDER
ENGLISH 1
PERIOD 3

- 1 FALL QUARTER
- 2 WINTER QUARTER
- 3 PREPARE FOR A NEW TERM

YOUR CHOICE?

When you wish to begin recording assignments and scores for a new term, you must select the last option offered on the screen above: **PREPARE FOR A NEW TERM**. Up to four terms can be entered on a diskette. Once four terms have been entered, the option **PREPARE FOR A NEW TERM** will no longer be offered. (You could also end the application here by typing **E** in reply to **YOUR CHOICE?**)

Entering a New Term After selecting **PREPARE FOR A NEW TERM**, you will see this screen:

ENTER THE NEW TERM.

- 1 FALL QUARTER
- 2 WINTER QUARTER
- 3 SPRING QUARTER

ANY CHANGES?

Following the list of terms already recorded, there will be a blank field of 15 spaces. You can type the title of the new term in this field and press **ENTER**. You can make any necessary changes in your entry by answering **Y** or **YES** to the query **ANY CHANGES?** You should proofread your entry carefully. *You will not be able to change it once it has been recorded.* When you answer **N** or **NO** to **ANY CHANGES?** the main menu will appear, and you will be able to enter information for this new term.

Using the Main Menu

Following the selection of an existing term or the addition of a new term, the main menu screen will appear.

CLASS DATA RECORDER

- 1 ENTER/EDIT DATA
- 2 PRINT REPORTS
- E END THIS PROGRAM

YOUR CHOICE?

Each of the first two choices on the main menu represents a single *branch* or subsection of the application. You may now wish to study the flow chart on pages 58-60. This flow chart will show you how each subsection of the application branches and how to return to the main menu. As noted on the flow chart, the **E** or **END** function can be used at almost any point in the application to end a branch or return to the main menu. When the query **ANY CHANGES?** or **YOUR CHOICE?** appears at the bottom of a screen, you can enter **E** or **END**; any information entered on that screen will be recorded, that branch will terminate, and the previous menu will appear.

Option 1: Enter/Edit Data

When you select Option 1 from the main menu, the following screen will be displayed.

```
ENTER AND EDIT DATA

1 NEW ASSIGNMENT AND SCORES
2 ASSIGN GRADELINES
3 EDIT RECORDS
4 ADD A STUDENT
5 ASSIGN FINAL GRADES
6 ENTER A NEW COURSE

YOUR CHOICE? 
```

These six options on the ENTER AND EDIT DATA secondary menu allow you to record new data or to correct data already stored on the diskette. You can perform any of these options for any term recorded on the diskette by choosing the appropriate term when you first begin working with the application. (If you are using the application for the first time, you can perform only Options 1, 3, and 4 at this time.)

Type the number of the desired option in the field following YOUR CHOICE? and press ENTER. To return to the main menu in order to print a report or to end the application, you should type E in reply to YOUR CHOICE? and press ENTER.

1. New Assignment and Scores

Entering Assignment Data Up to forty assignments for each of four terms can be recorded on a diskette. The computer will automatically assign a number to the assignment when you select the option NEW ASSIGNMENT AND SCORES. You should note that at the beginning of a new term the computer will again designate the first assignment entered as number 1. For instance, when you enter the first assignment of the second term, the statement THIS IS ASSIGNMENT #1 will appear.

```
FALL QUARTER          PERIOD 3

THIS IS ASSIGNMENT #5
NAME? COMPOSITION 1
IS IT PASS/FAIL? NO
WEIGHT? 3
TOTAL POINTS? 10

ANY CHANGES? 
```

You must enter the following information on the screen shown above:

NAME: 15 spaces; any characters. You should enter a name which will clearly describe the assignment you wish to record, such as "Grammar Quiz 2" or "Multiplication Test."

IS IT PASS/FAIL?: 3 spaces; YES or NO. If you wish an assignment to be recorded with only a mark of pass or fail, you should reply YES. If, however, you prefer to use gradelines, you should answer NO.

WEIGHT: 3 spaces; numbers only. If you answered N or NO to the question WILL ASSIGNMENTS BE WEIGHTED? when entering the course data (see page 38), three dashes will appear in this field and the cursor will automatically skip to the next field. If your answer was Y or YES, you could now assign a weight to an assignment by entering a number between .01 and 10 in this field. For instance, for an important test like a midterm exam, you might designate a weight of 10; for a surprise quiz, you might only designate a weight of 2.2 In this instance, the computer will multiply all students' midterm exam scores by 10 and their surprise quiz scores by 2.2 when figuring the cumulative weighted percentage. If weighting is not used, the computer will record the average percentage score.

The user should carefully consider the use of weighting with pass/fail assignments. Students who receive a P will be awarded all of the possible points, and those who receive an F will be awarded no points. Thus, when the cumulative weighted averages are computed, the assignment's weight will be multiplied by either 100 (for each student who passed) or by 0 (for each student who failed). For example, a weight of 5 on a pass/fail assignment would award 500 points to the student who passed, but would award no points to the student who failed. Thus, a relatively large weight

for a pass/fail assignment would create an inequity in grading. This can be prevented by weighting pass/fail assignments with relatively low weights, or by weighting them with 0, in which case the assignments would not count at all towards the cumulative weighted average percentage.

TOTAL POINTS: 3 spaces; numbers only. In this field you should enter the maximum number of points a student can score on the assignment.

After you enter your data, the question **ANY CHANGES?** will appear. You can correct your entries by answering **Y** or **YES** and using the editing keys. When you answer **N** or **NO**, the display shown in the next section will appear on the monitor to enable you to record each student's score.

Important: If you choose the option **ENTER ASSIGNMENT AND SCORES** from the **ENTER AND EDIT DATA** menu and forty assignments have already been recorded, the message **ASSIGNMENT FILE IS FULL** will appear below the list of options on the menu. The cursor will continue to flash following **YOUR CHOICE?**

It is advisable to enter the students' scores now. If you were to end this branch of the application without entering scores, the only way to enter the scores later would be to use the **EDIT STUDENT SCORES** option. This would prove to be a slow and inefficient method to record the scores for an entire class, and should be avoided.

Entering Assignment Scores After you have described an assignment, you will see a display prompting you to **ENTER THE RAW SCORE**. The names of your students with their record numbers will appear one at a time in alphabetical order on this screen. Unless you designated an assignment as pass/fail when entering the assignment data, you must record the raw score of each student.

Each student's raw score is entered in the 3 spaces below the name by typing in the score and then pressing **ENTER**. On the following sample screen, the entries show that a student answered 9 out of 10 questions correctly.

FALL QUARTER PERIOD 3

ASSIGNMENT NUMBER 5

NAME COMPOSITION 1

ENTER THE RAW SCORE.

15 EDGERTON, DAVID

SCORE 9

Now the next name in sequence will appear so that you can continue entering scores for your entire class. If a student has no score for an assignment, you should leave the field blank and press **ENTER**, and the assignment will be recorded as missing from the student's scores. That student's score can be entered later using the **EDIT STUDENT SCORES** option.

Important: If you enter a score that is larger than the total possible points for that assignment, an error tone will sound and the cursor will continue to flash at the start of the field.

If the assignment is to be recorded as simply pass/fail, the screen shown above will also appear. However, in this case, you would be cued to enter **P** or **F** after each student's name.

Important: On a pass/fail assignment, the computer will accept only **P** or **F** as a score. An error tone will sound and the cursor will continue to flash in the field if another character is entered.

Each time you enter a score for a student, the **ENTER AND EDIT DATA** menu will reappear, enabling you to make another selection or return to the main menu.

2. Assign Gradelines

The option **ASSIGN GRADELINES** allows you to designate the intervals between point scores that the computer will use in calculating letter grades for a particular assignment. Before assigning gradelines, you might find it helpful to print a histogram (page 54) of the assignment, which will be useful to you in creating a grading curve.

Important: You are not required to assign gradelines to an assignment. The computer does not use these letter grades when analyzing scores.

When you select the **ASSIGN GRADELINES** option, a statement will appear at the top of the monitor informing you of the number of the last

assignment recorded. The question ASSIGNMENT NUMBER? will also appear followed by a field of 2 spaces. Type the appropriate assignment number in this field and press ENTER. (Assignment numbers can be found on Report 3, "Student Summary," and on Report 5, "Class Averages by Assignment.") Now the name of the corresponding assignment will appear. *Important:* If you enter a number for which there is no corresponding assignment, an error tone will sound. If you type the number of an assignment for which gradelines have already been recorded, an error tone will sound and the message GRADELINES ARE ASSIGNED will appear. Typing the number of a pass/fail assignment will cause an error tone to sound and the message IT'S A PASS/FAIL ASSIGNMENT will appear. In each of these cases, the cursor will continue to flash at the start of the ASSIGNMENT NUMBER field.

If you answer N or NO to the question DO YOU WISH TO PROCEED?, the cursor will return to the ASSIGNMENT NUMBER field, enabling you to enter a different number. If you wish to return to the ENTER AND EDIT DATA menu, type E or END and press ENTER. If you answer Y or YES, the following display will appear, allowing you to enter gradelines.

ASSIGNING GRADELINES

THE LAST ASSIGNMENT IS #10
 ASSIGNMENT NUMBER?
 POETRY TEST

ENTER THE RAW SCORE.

A-LINE <input type="text" value="45"/>	C-LINE <input type="text" value="35"/>
B-LINE <input type="text" value="40"/>	D-LINE <input type="text" value="30"/>

ANY CHANGES?

A blank field of 3 spaces will follow each gradeline. The cursor will be flashing at the start of the A-LINE field. You should enter the lowest raw score for which you want a student to receive an A. For example, if you entered 23 as the A-line, every student who had a raw score of 23 or above on the assignment would receive an A. This letter grade would be printed on any report that includes this assignment.

You should decide on an appropriate grade interval for the assignment (see use of histograms,

page 54) and type a number in each gradeline, pressing ENTER each time. For instance, if you wanted a grade interval of 2 on an assignment of 25 total points, the A-line could be 23; the B-line, 21; the C-line, 19; and the D-line, 17. In this case, a student scoring below 17 would receive an F.

You should note that each gradeline below A must be at least one digit lower than the last gradeline above it. In other words, if you entered 85 as the B-line, the C-line must be 84 or below. If a higher value were entered, the error tone would sound and the cursor would continue to flash in the C-LINE field. Also, the A-line cannot be higher than the total points entered for the assignment or lower than 4 (so that lower gradelines can be at least one digit apart). An error tone will again sound if a too-high entry is made and the cursor will continue to flash in the blank field.

After gradelines have been assigned, the query ANY CHANGES? will appear. If you answer Y or YES, the cursor will return to the start of the A-LINE field enabling you to edit your entries. A reply of N/NO or E/END will bring back the ENTER AND EDIT DATA menu.

3. Edit Records

If you select the option EDIT RECORDS you will be given four further choices:

EDIT DATA

- 1 STUDENT SCORES
- 2 STUDENT NAMES
- 3 ASSIGNMENT DATA
- 4 FINAL GRADES

YOUR CHOICE?

You should enter your selection in the field following YOUR CHOICE? Each of these options is described below. To return to the ENTER AND EDIT DATA menu from this menu, type E("end") and press ENTER.

Editing Student Scores If you select this option, the prompt RECORD # followed by a blank field

of 2 spaces will appear. Type the record number of the student whose score you wish to examine and press ENTER. (Each student's record number is shown on Report 1, "Class List.")

Important: If you enter a record number for which there is no corresponding student name, an error tone will sound.

After entering a record number, the corresponding student's name and the question DO YOU WISH TO PROCEED? will appear on the monitor. If you answer NO, the cursor will return to the RECORD field enabling you to type another number. You can return to the EDIT DATA menu by typing E or END and pressing ENTER. If you answer YES, the screen displayed below will appear:

```

      EDIT STUDENT SCORES

RECORD #3
BALDWIN, EUGENE

ENTER THE ASSIGNMENT NUMBER.

#4      POETRY TEST      50

      ANY CHANGES? 

```

In the field of 2 spaces below the statement ENTER THE ASSIGNMENT NUMBER, type the number of the assignment and then press ENTER. Now the name of the corresponding assignment and the score that the student received will appear along with the question ANY CHANGES? On the screen shown below, the assignment number 4 was entered. Then the corresponding assignment name POETRY TEST and the student's score of 50 appeared.

Answering Y or YES to the question ANY CHANGES? will cause the cursor to flash at the start of the SCORE field and you can make the necessary change by the usual editing procedure. When you answer N or NO to ANY CHANGES?, the fields on the screen will go blank and you can enter the record number of another student in order to examine that student's score.

You can return to the EDIT DATA menu by typing E (end) for the record number, or by typing E or END in reply to ANY CHANGES? and pressing ENTER.

Editing Student Names When you select this option the computer will again ask you for a student's record number. After you enter a number, the corresponding student's name will appear below it. If you wish to make any changes, answer Y or YES to the query ANY CHANGES?, and the cursor will begin to flash at the start of the NAME field. For example, when you originally entered the students' names, if you used initials on some entries (e.g., Anderson, M.), you may wish to change an entry if another student with the same last name joins your class.

An answer of N or NO to the query ANY CHANGES? will cause the fields on the screen to go blank enabling you to enter the record number of another student. You can return to the EDIT DATA menu by typing E ("end") in the RECORD NUMBER field, or by typing E or END in reply to ANY CHANGES? and pressing ENTER.

Deleting a Student's Record After selecting STUDENT NAMES from the EDIT DATA menu, you begin the deletion process by entering the student's record number. Then the question ANY CHANGES? will flash on the monitor. Type DEL ("delete") and press ENTER. The entire record for that student will automatically be erased.

Important: Before entering DEL in the field following ANY CHANGES?, be certain that you are erasing the correct record. Also, before erasing a student's record, you should print a "Student Summary" (page 00) for future reference.

You should print a new "Class List" every time you delete a student's record, since this deletion changes your classroom roster. Also, you should note that the computer will reassign the record number of the student whose record has been deleted the next time you add a student's name.

Editing Assignment Data To use this option, you must enter the number of the assignment which you wish to view in the field of 2 spaces. (The number of each assignment can be found on Report 3 and Report 5.) Then all the data stored on the diskette for that assignment will be displayed, as shown on the following screen.

EDIT ASSIGNMENT DATA

ASSIGNMENT NUMBER
NAME
WEIGHT
TOTAL POINTS
A - LINE C - LINE
B - LINE D - LINE
ANY CHANGES?

If there are changes to be made, reply Y or YES to the query ANY CHANGES? The cursor will begin to flash at the start of the NAME field. As explained in "Correcting Input Errors," use the ENTER key to move the cursor through any still-valid fields. When you reach a field that is to be altered, erase the old data or simply type the new information over it. Then press ENTER to move on.

When you answer N or NO to ANY CHANGES?, the fields on the display will go blank and you will be able to enter the number of another assignment you wish to view. To return to the EDIT DATA menu, type E in the ASSIGNMENT NUMBER field, or E or END in reply to ANY CHANGES?, and press ENTER.

Notice that *Class Data Recorder* automatically guards against illogical entries in the TOTAL POINTS field or in gradelines when you are correcting assignment data. In the TOTAL POINTS field, the application will not accept a number lower than the highest score previously recorded for that assignment. For example, if the highest score on an assignment was 45 and you tried to change the TOTAL POINTS to 40, an error tone would sound and the cursor would continue to flash in that field. The application will also refuse to accept a change in a gradeline that makes it equal to or higher than the gradeline above it, unless that gradeline is also changed. For instance, if 35 was originally entered as the C-line and you changed the A-line to a value less than or equal to 35, you would be required to change the B-line and the C-line (and perhaps the D-line) until the value of the A-line was once again greater than the B-line, the B-line was greater than the C-line, and the C-line was greater than the D-line.

You should note that it is not possible to delete an assignment by typing DEL ("delete") in reply

to ANY CHANGES? However, if after entering and grading an assignment you decide not to count it, you can edit its weight to zero.

Editing Final Grades In order to edit a student's final grade, you must type the record number in the appropriate field of 2 spaces and press ENTER. The student's name and final grade, along with the query ANY CHANGES?, will appear on the monitor. By answering Y or YES, you will be able to change the student's final grade. If you reply N or NO, the fields on the screen will go blank and you can enter another student's record number. You can return to the EDIT DATA menu by typing E in the RECORD NUMBER field, or E or END in reply to ANY CHANGES?

If you select this option from the EDIT DATA menu and you have not yet entered the final grades for the term, the message NO FINAL GRADES EXIST will appear below the list of options on the menu. The cursor will continue to flash in the field following YOUR CHOICE? If you wish to return to the ENTER AND EDIT DATA menu, it will then be necessary to type E and press ENTER.

4. Add a Student

When you select the option to add a student's name, the same display as the one you used initially to enter a class list will appear (see page 39). The procedure for entering additional student names is also the same. The computer will automatically insert any additional names alphabetically as they are entered. *Remember to use a comma between the last name and the first.* When you have finished entering the last name and wish to return to the ENTER AND EDIT DATA menu, enter END in the NAME field. It is also possible to return to this menu by replying with E or END to the query ANY CHANGES? on the display on which you entered the last name.

The computer will assign the lowest available record number to any student whose name is added. Therefore, if you had deleted any records, the computer would first reassign those numbers. Since using this option will change your classroom roster, you should print an up-to-date "Class List" after adding students' names.

If forty student names have been recorded on the diskette when this option is chosen from the ENTER AND EDIT DATA menu, the message THE CLASS IS FULL will appear below the list of options. The cursor will continue to flash following YOUR CHOICE?

5. Assign Final Grades

This option is to be used at the end of the term when all assignment scores have been recorded. When you choose this option from the ENTER AND EDIT DATA menu, the question ARE YOU SURE? will appear below the list of options. If you answer N or NO, the cursor will return to the field following YOUR CHOICE?, so that you can make another selection. If you reply Y or YES, the following screen will be displayed:

```
ENTER THE FINAL GRADE  
  
RECORD 6  
CHANG, DENNIS  
FINAL GRADE B+
```

Your students' names (with corresponding record numbers) will appear one at a time in alphabetical order. You should type each student's final grade for the term in the appropriate field of 2 spaces and press ENTER. You can enter any two characters you wish, such as -A, B+, or 88.

If you do not wish to assign a final grade to a particular student, press the underscore character and then press ENTER. That student's final grade will be printed as a blank line. It can be recorded later by using the EDIT FINAL GRADES option (see page 45).

Important: Once final grades have been entered, no new assignments may be entered for that grading period.

6. Enter a New Course

You may wish to use this option at the start of the school year, when the course data, class list, and assignment scores on the diskette are no longer valid. However, by using this option, you will erase all the data stored on the diskette. The computer will automatically erase all the data stored on the diskette and then display the screen for entering new course data (see page 38).

Option 2: Printing the Reports

When you select this option from the main menu, you will next see the REPORTS menu, which shows the seven reports offered by *Class Data Recorder*:

```
REPORTS  
  
1 CLASS LIST  
2 ASSIGNMENT SUMMARY  
3 INDIVIDUAL STUDENT SUMMARY  
4 CUMULATIVE CLASS AVERAGES  
5 CLASS AVERAGES / ASSIGNMENT  
6 RANK LIST  
7 HISTOGRAM  
  
YOUR CHOICE? 
```

You can print any of these reports for whichever term you selected when you first began work on the application.

The title of the report, along with such course data as course title, teacher's name, period of the day, and the term, will appear at the top of each report. Three asterisks (***) on a report indicate that a score is missing. The computer does not use missing scores when calculating averages.

After a report is printed, the REPORTS menu will automatically return to the monitor. To return to the main menu from this point, you should type E in reply to YOUR CHOICE? and press ENTER.

Report 1: Class List

The "Class List" is the only report you can print before entering an assignment and scores. If you choose another report before assignments and scores have been recorded, the message NO ASSIGNMENTS RECORDED will appear on the REPORTS menu. The cursor will continue to flash in the field following YOUR CHOICE?

As soon as you select Report 1 from the REPORTS menu, the PRINTING screen will appear on the monitor and the computer will begin to print the "Class List."

This report lists your students alphabetically along with each of their record numbers. It is important to have an up-to-date copy of this report since you will need to know a student's record number to call up his or her record on the screen. Therefore, you should print a "Class List," not only after creating a class record (see page 39), but also after adding or deleting students' names.

You can use the blank grid which is printed on this report to keep a written record of attendance, class participation, or appointments.

09/07/82

*** CLASS LIST ***

ENGLISH 1
MR. LEWIS

PERIOD 3
FALL QUARTER

RECORD	NAME									
2	ANDERSON, MARGARET	/	/	/	/	/	/	/	/	/
3	BALDWIN, EUGENE	/	/	/	/	/	/	/	/	/
1	CARTER, DENISE	/	/	/	/	/	/	/	/	/
6	CHANG, DENNIS	/	/	/	/	/	/	/	/	/
15	EDBERTON, DAVID	/	/	/	/	/	/	/	/	/
8	ENGSTROM, THOMAS	/	/	/	/	/	/	/	/	/
7	FERRARA, DOMINICK	/	/	/	/	/	/	/	/	/
10	GUTIERREZ, CARMEN	/	/	/	/	/	/	/	/	/
11	JEFFERSON, WALTER	/	/	/	/	/	/	/	/	/
4	LLOYD, JOHN	/	/	/	/	/	/	/	/	/
14	MOSKOWITZ, EILEEN	/	/	/	/	/	/	/	/	/
13	NAGUCHI, JANET	/	/	/	/	/	/	/	/	/
12	O'HARA, KATHRYN	/	/	/	/	/	/	/	/	/
9	SANTIAGO, FELIPE	/	/	/	/	/	/	/	/	/
5	WALKER, SARA	/	/	/	/	/	/	/	/	/

Report 2: Assignment Summary

When you choose this report, the number of the last assignment you recorded will be displayed as follows: THE LAST ASSIGNMENT IS #10. The question ASSIGNMENT NUMBER? will also appear, followed by a field of 2 spaces. You should type the number of the assignment you wish the computer to summarize and press ENTER.

(Assignment numbers can be found on Report 3 or Report 5.) Now the name of the corresponding assignment will come onto the monitor along with the query DO YOU WISH TO PROCEED? The screen will now look like this, and you should make certain that this is the assignment you wish to print:

```

      ASSIGNMENT SUMMARY
THE LAST ASSIGNMENT IS #10
ASSIGNMENT NUMBER? 9
QTR PROJECT

DO YOU WISH TO PROCEED? 
```

If you answer N or NO, the cursor will begin to flash again in the blank ASSIGNMENT NUMBER field, and you can enter a different number. If you do not wish to continue at this time, reply E or END and you can return to the REPORTS menu to make another selection. When you answer Y or YES, the computer will begin to print a summary of the assignment you selected.

On this report, the students' names appear in alphabetical order with their record numbers. You are also given each student's raw score, percentage, and letter grade for the assignment. Grades are only printed if you had assigned gradelines for this assignment. If you had designated the assignment as pass/fail, either P or F would appear in the grade column. The class averages for both raw scores and percentages, the total points possible, and the weight of the assignment are provided at the bottom of the report (if the weighting option is used). If you had designated gradelines for the assignment, these would also appear at the bottom of the report.

The sample report shown here is an "Assignment Summary" of a pass/fail assignment. As you can see each student received either 10 or 0 as a raw score and either P or F as a grade.

11/08/82

*** ASSIGNMENT SUMMARY ***
#3 HOMEWORK 1

ENGLISH 1
MR. LEWIS

PERIOD 3
FALL QUARTER

RECORD	NAME	RAW SCORE	% SCORE	GRADE
2	ANDERSON, MARGARET	10	100	P
3	BALDWIN, EUGENE	10	100	P
1	CARTER, DENISE	10	100	P
6	CHANG, DENNIS	10	100	P
15	EDGERTON, DAVID	10	100	P
8	ENGSTROM, THOMAS	0	0	F
7	FERRARA, DOMINICK	0	0	F
10	GUTIERREZ, CARMEN	10	100	P
11	JEFFERSON, WALTER	10	100	P
4	LLOYD, JOHN	10	100	P
14	MOSKOWITZ, EILEEN	0	0	F
13	NAGUCHI, JANET	10	100	P
12	O'HARA, KATHRYN	10	100	P
9	SANTIAGO, FELIPE	10	100	P
5	WALKER, SARA	10	100	P

CLASS AVERAGE: 8 POINTS 80%
POSSIBLE SCORE: 10 POINTS
WEIGHT: 1

*** INDICATES THE ITEM IS MISSING.

Report 3: Individual Student Summary

This is the report you will find most useful in monitoring each student's progress and in diagnosing strengths and weaknesses.

In order to print this report, you must type the appropriate student record number in the 2 spaces following STUDENT RECORD # and press ENTER. Then the corresponding student's name and the question DO YOU WISH TO PROCEED? will appear.

```

FALL QUARTER      PERIOD 3

STUDENT RECORD #15
EDGERTON, DAVID

DO YOU WISH TO PROCEED? 
    
```

If you wish to continue, answer Y or YES to the question DO YOU WISH TO PROCEED? and

that student's summary will be printed. If you answer N or NO, the cursor will return to the STUDENT RECORD # field enabling you to enter a different student's record number. An answer of E or END will return you to the REPORTS menu.

On the sample report shown below, the student's name, "David Edgerton," and the record number 15 appear at the top of the report with the course data. Then each assignment stored on the diskette is listed with its assignment number and weight (if designated). The student's raw score, the total points possible, the student's percentage, and the grade are also shown. (If you did not designate gradelines for a particular assignment, the grade column remains blank.) A grade of P appears for assignments 3 and 6 which are pass/fail assignments. The student's weighted average percentage is provided at the bottom of the report (if the weighting option is used).

As you can see on the sample, the student was given as a raw score all the points of the pass/fail assignments because he passed them.

You can use this report as an effective aid at parent-teacher conferences since it provides an up-to-date summary of a student's performance throughout the grading period. It could also be useful when determining the student's final grade for the term.

11/08/82

*** STUDENT SUMMARY ***
EDGERTON, DAVID #15

ENGLISH 1
MR. LEWIS

PERIOD 3
FALL QUARTER

NUMBER	WT	DESCRIPTION	RAW SCORE	TOTAL POINTS	% SCORE	GRADE
1	5	POETRY QUIZ 1	20	20	100	A
2	5	POETRY QUIZ 2	19	20	95	A
3	1	HOMEWORK 1	10	10	100	P
4	8	POETRY TEST	50	50	100	A
5	3	COMPOSITION 1	9	10	90	A
6	1	HOMEWORK 2	10	10	100	P
7	3	COMPOSITION 3	8	10	80	B
8	8	COMP FINAL	46	50	92	A
9	5	QTR PROJECT	16	20	80	B
10	10	FALL FINAL EXAM	98	110	89	A

THE WEIGHTED PERCENTAGE IS: 92 %
FINAL GRADE: A-

*** INDICATES THE ITEM IS MISSING.

Report 4: Cumulative Class Averages

As soon as you choose this report, the PRINTING screen will appear. When printing is completed, you will be returned to the REPORTS menu.

This report (see the following sample) provides each student's weighted average percentage (if the weighting option is used) for all the assignments stored on the diskette (for that marking period). When final grades have been recorded, they will also appear.

The computer calculates a student's weighted percentage by multiplying each assignment's percentage score by its weight, then dividing the total of the adjusted percentages by the total of the weights.

Important: When three asterisks (***) appear after a student's percentage, they indicate that no score was recorded for that student on an assignment. You should remember that missing assignments are not considered by the computer when it is calculating averages.

11/12/82

*** CUMULATIVE CLASS AVERAGES ***
AVERAGES COMPUTED THROUGH ASSIGNMENT 10.

ENGLISH 1
MR. LEWIS

PERIOD 3
FALL QUARTER

RECORD	NAME	WEIGHTED PERCENTAGE	FINAL GRADE
2	ANDERSON, MARGARET	85	B
3	BALDWIN, EUGENE	93***	--
1	CARTER, DENISE	90	A-
6	CHANG, DENNIS	89	B+
15	EDGERTON, DAVID	92	A-
8	ENGSTROM, THOMAS	81	B-
7	FERRARA, DOMINICK	74	C
10	GUTIERREZ, CARMEN	86	B
11	JEFFERSON, WALTER	88***	--
4	LLOYD, JOHN	81	B-
14	MOSKOWITZ, EILEEN	78***	--
13	NAGUCHI, JANET	85	B
12	O'HARA, KATHRYN	81	B-
9	SANTIAGO, FELIFE	82	B-
5	WALKER, SARA	84	B

*** INDICATES AN ITEM WAS MISSING WHEN DOING THE CALCULATIONS.

Report 5: Class Averages by Assignment

As soon as you select this report, the PRINTING screen will appear. When printing is completed, you will be returned to the REPORTS menu.

As you can see on the sample report illustrated, Report 5 provides you with the range of raw scores for the whole class and the average percent scored on each assignment recorded on the diskette (for that marking period).

Important: A pass/fail assignment will always show zero as the low end of the raw range and the total

points possible as the high end of the raw range. This occurs because a student who passes is awarded the maximum points and a student who fails receives no points.

The number of missing scores for each assignment is listed under NO SCORES. This indicates the number of students who did not complete a particular assignment or test because of absence or some other circumstance. On the sample report, one student failed to complete assignments 2, 5, and 7.

11/08/82

*** CLASS AVERAGES BY ASSIGNMENT ***

ENGLISH 1
MR. LEWIS

PERIOD 3
FALL QUARTER

NO	WT	DESCRIPTION	NO SCORES	RAW AVERAGE	TOTAL POSSIBLE	RAW RANGE	CLASS AVG %
1	5	POETRY QUIZ 1	0	17	20	12- 20	85
2	5	POETRY QUIZ 2	1	17.1	20	13- 20	85
3	1	HOMEWORK 1	0	8	10	0- 10	80
4	8	POETRY TEST	0	43.9	50	36- 50	88
5	3	COMPOSITION 1	1	8.3	10	6- 10	83
6	1	HOMEWORK 2	0	8.7	10	0- 10	87
7	3	COMPOSITION 3	1	8.6	10	7- 10	86
8	8	COMP FINAL	0	43.9	50	38- 50	88
9	5	QTR PROJECT	0	17.5	20	12- 19	87
10	10	FALL FINAL EXAM	0	85	110	62- 98	77

Report 6: Rank List

As you can see by the sample report shown below, Report 6 is similar to Report 4. However, on this report your students are listed in order of their weighted average percentage (or percent of total points if the weighting option is not used) instead of alphabetically.

Since the computer must organize the names of your students in order of their rank before printing, it requires several minutes to sort the list before printing this report (depending on the size of your class and the number of assignments

recorded). While the computer is organizing the data, the message SORTING will appear on the monitor. When sorting is completed, the computer will begin to print the report automatically and the PRINTING screen will be displayed.

You should note that in calculating averages the computer does not count a student's missing assignments (indicated by *** appearing after the percentage).

11/03/82

S3.2f

*** CLASS RANK BY PERCENTAGE AVERAGE ***
RANKING THROUGH ASSIGNMENT 10

ENGLISH 1
MR. LEWIS

PERIOD 3
FALL QUARTER

RANK	NAME	RECORD	WEIGHTED PERCENTAGE
1	BALDWIN, EUGENE	3	93***
2	EDGERTON, DAVID	15	92
3	CARTER, DENISE	1	90
4	CHANG, DENNIS	6	89
5	JEFFERSON, WALTER	11	88***
6	GUTIERREZ, CARMEN	10	86
7	ANDERSON, MARGARET	2	85
8	NAGUCHI, JANET	13	85
9	WALKER, SARA	5	84
10	SANTIAGO, FELIPE	9	82
11	O'HARA, KATHRYN	12	81
12	LLOYD, JOHN	4	81
13	ENGSTROM, THOMAS	8	81
14	MOSKOWITZ, EILEEN	14	78***
15	FERRARA, DOMINICK	7	74

Report 7: Histogram

A *histogram* is a graphic illustration of how many of the students in your class score within a specified range of points.

When you select this report from the REPORTS menu, you will be able to choose between two types of histograms:

HISTOGRAMS

- 1 INDIVIDUAL ASSIGNMENTS
- 2 CUMULATIVE ACHIEVEMENT

YOUR CHOICE?

The first choice, INDIVIDUAL ASSIGNMENTS, will show you a distribution of how many students scored within each specified range for any assignment you select. The second choice, CUMULATIVE ACHIEVEMENT, will show you a similar distribution covering all the assignments stored on the diskette.

If you select to print an INDIVIDUAL ASSIGNMENT histogram, you will be asked to specify the number of the desired assignment. Then the corresponding assignment name and the query DO YOU WISH TO PROCEED? will appear. Make sure the desired assignment is on the screen before answering Y or YES.

Important: If you enter a number for which there is no corresponding assignment, an error tone will sound and the cursor will continue to flash in a blank field.

If you answer N or NO to the query, the cursor will begin to flash in the ASSIGNMENT NUMBER field enabling you to enter another assignment number. You can return to the REPORTS menu by entering E or END. After a response of Y or YES, a screen offering two choices will appear on the monitor:

HISTOGRAM

- 1 RAW SCORES
- 2 PERCENTAGES

YOUR CHOICE?

If you choose to print a histogram showing cumulative achievement, the two choices shown above will appear immediately after you select this particular type of histogram.

Important: The "Cumulative Achievement by Percentage" histogram displays the frequency of cumulative scores according to the weighted percentage. Therefore, this report should only be printed when the weighting option is used.

The screen CALCULATING will appear on the monitor briefly. Then the question INTERVAL WIDTH? will appear followed by a field of 3 spaces.

Interval Width At this point you can determine the groupings within which your students will be placed. For example, if you wanted to print a histogram of a particular assignment by percentages, you could enter an interval width of 10. The resulting report would show you how many students scored within each group of 10 points, beginning with 100 percent. Therefore, even though the highest percentage score received by a student on a single assignment was 96, the interval width of 10 would produce groupings of 91-100, 81-90, 71-80, etc., until the lowest range in which a student scored had been printed. An INDIVIDUAL ASSIGNMENT histogram by percentages, with an interval width of 10, is shown here:

Important: It is recommended that the "Cumulative Achievement by Raw Scores" report not be used when determining final grades if the weighting option is being used. It will not be an accurate reflection of the weighted scores. Refer to the "Cumulative Achievement by Percent" report when determining final grades.

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*** HISTOGRAM BY PERCENTAGE ***
#10 FALL FINAL EXAM

ENGLISH 1
MR. LEWIS

PERIOD 3
FALL QUARTER

INTERVAL		TOTALS	PERCENTAGE OF STUDENTS
91-100		0	0
81-90	XXXXX	5	33
71-80	XXXXXXXXX	8	53
61-70	X	1	7
56-60	X	1	7
		TOTAL 15	

The X's appearing after a group of points represent the number of students scoring within that range. The number of students represented on

the histogram is totaled and the percentage of students scoring in each interval is also shown.

If you wished to print a histogram of a particular assignment by raw scores, you could also enter an interval width of 10. The resulting report would show you the number of students scoring within each 10-point interval beginning with the total possible points of the assignment. Therefore, if the maximum point score for an assignment is 110, an interval width of 10 would produce groupings of 101-110, 91-100, 81-90, even though the highest raw score received on the assignment was 95.

However, for a CUMULATIVE ACHIEVEMENT histogram by raw score, the maximum points printed would be the *total of all*

the highest scores actually obtained by students on all of the included assignments. Suppose the CUMULATIVE ACHIEVEMENT histogram included three 50-point assignments, but the highest scores obtained on each were 48, 50, and 46. Then the highest point value printed would be 144, *not* 150. Then the ranges would be printed in descending order from 144 (with an interval width of 10): 135-144, 125-134, 115-124, etc. A CUMULATIVE ACHIEVEMENT histogram by raw scores with an interval width of 5 is shown here:

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53.2*

*** HISTOGRAM BY RAW SCORES ***
THROUGH ASSIGNMENT 10

ENGLISH 1
MR. LEWIS

PERIOD 3
FALL QUARTER

INTERVAL	TOTALS	PERCENTAGE OF STUDENTS
306-310	0	0
301-305	0	0
296-300	0	0
291-295	0	0
286-290 X	0	0
281-285	1	7
276-280 X	0	0
271-275 X	1	7
266-270 XX	1	7
261-265 XX	2	13
256-260 X	2	13
251-255 X	1	7
246-250 X	1	7
241-245 XX	1	7
236-240 X	2	13
231-235	1	7
226-230 X	0	0
223-225 X	1	7
	1	7
TOTAL	15	

Determining Interval Width You should choose an interval width that will clearly illustrate the distribution of your students' scores. As a general rule, the ratio comparing the total points with the interval width should be 10 to 1. For example, if the total point score is 10, then the interval width should be 1; if total points = 50, interval width = 5; if total points = 400, interval width = 40. After printing several histograms, you will be able to more easily determine the interval width that best applies to your class or a given assignment.

The computer will not accept an interval width that will create *more than 40 groups*. If you enter such an interval, the message INTERVAL WIDTH IS TOO SMALL will appear. Suppose that out of a possible 400 points, one of your students scored 400 points, and another student scored only 127 points. If you chose to print a raw score histogram with an interval width of 5, the computer would need to print 55 groups of 5 points each (396-400, 391-395, 386-390, etc.) in order to include the student who scored within the range of 126-130. In this case, the interval width would be too small, and you would need to increase it. An interval width of 10 would produce only 28 groups of 10 points each, which would be acceptable in this case.

If you try to designate an interval width larger than the total points possible on the assignment or assignments, the message INTERVAL WIDTH IS TOO LARGE will appear. You would then be required to designate a smaller interval width.

A histogram can be an important tool when you are grading an individual assignment or assigning midterm or final grades. You can use the report to help you construct a valid grading curve in order to designate gradelines. By studying a histogram, you can determine in which range most of your students scored. You could then use this range to designate the C-line. The other gradelines would follow accordingly.

Pages 58-60 contain the
Class Data Recorder Flow Chart

Hints to Help You

When you terminate a work session by entering E at the end of the main menu, you will see a message reminding you to make a copy of your diskette if it contains significant new data, and to remove it before turning off the power. You should keep a backup copy since the data stored on the diskette could be accidentally erased. If you are not certain how to copy a diskette using your *Disk Manager* module, consult "Backing Up Diskettes" in Part 1.

Class Data Recorder can be an excellent aid to you when analyzing assignment and test scores. The varied reports that this application produces can provide you with an effective means of checking and communicating your students' progress. Any or all of the reports are valuable tools for parent-teacher conferences. When an administrator requests a progress report, you can generate a complete set of reports in a relatively short period.

The flow chart is an important aid as you become familiar with *Class Data Recorder*, because it gives you an overview of the complete application.

Caring for Your Module

School Management Modules are sturdy devices that cannot jam or be accidentally erased. Nonetheless, they deserve the same care you would give any high-quality piece of electronic or audio-visual equipment. Keep the module clean and dry and do not touch its recessed contacts. **Important:** Like data on diskettes, the program stored in a module can be damaged by static electricity discharges. Keep the module away from sources of static. See "Avoiding Accidental Data Loss" in Part 1.

In Case of Difficulty

If the module does not appear to be performing properly, return to the preliminary Texas Instruments screen by turning the computer off and then on again. Withdraw the module, realign it with the module port on the console, and reinsert it carefully. Then press any key to make the master selection list appear. The title of the module should be on this list. Press the appropriate key to restart the application. If the problem continues, turn the console off, wait a few seconds, then switch it on and again restart the application as above.

If the module is accidentally removed from the console port while being used, the computer may

behave erratically. To restore normal operation, turn off the console, wait a few seconds, reinsert the module carefully, and switch on again.

If you experience further difficulty, consult "Checking Your System" in Part 1. Additional information may be found in your *User's Reference Guide* for the TI 99/4. If you need further assistance, contact the Customer Service Representative for Electronic Publishing at your nearest Scott, Foresman Regional Office, or your local authorized Scott, Foresman dealer.