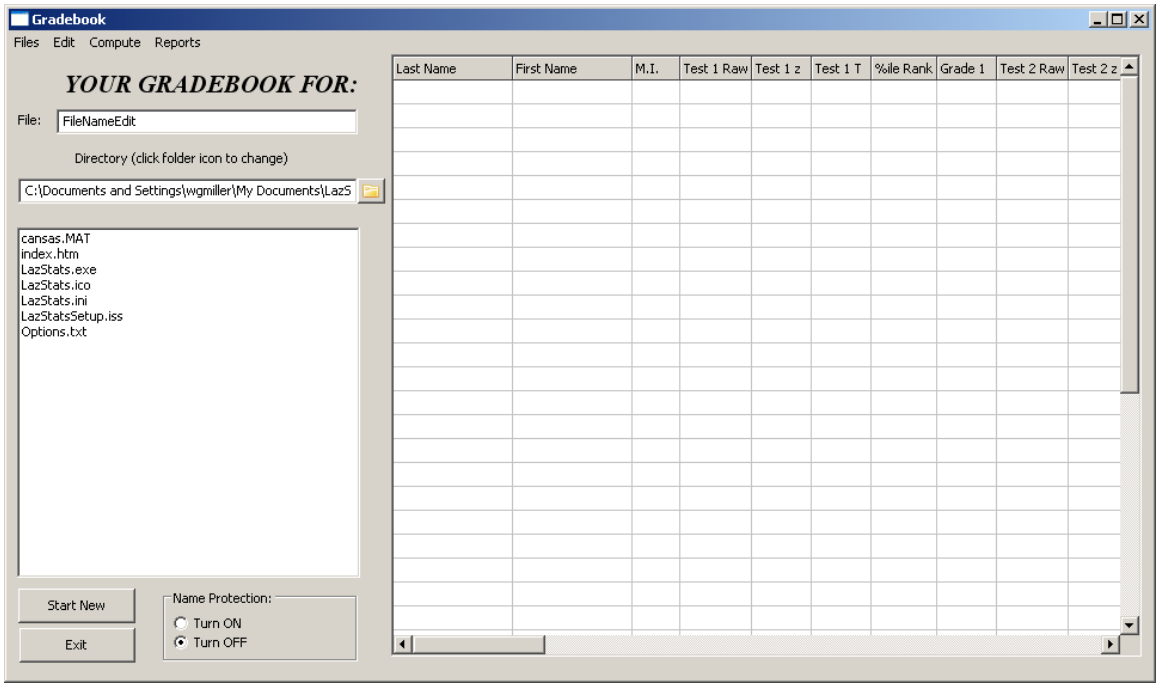
GRADEBOOK PROGRAM

Introduction

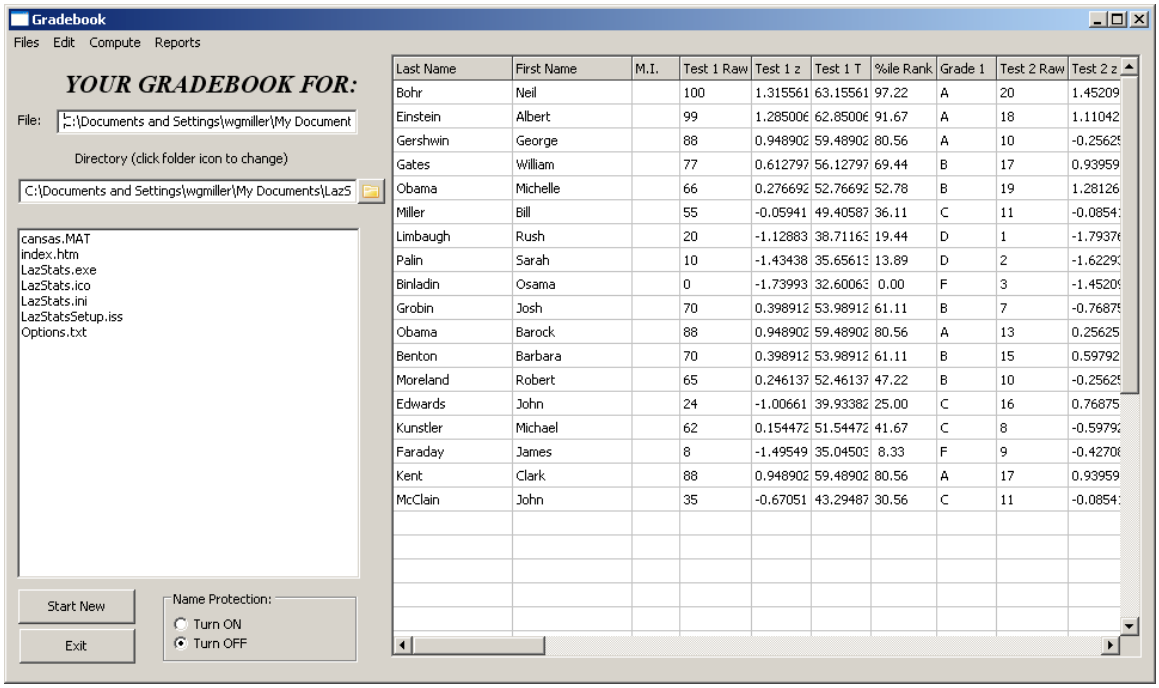
The gradebook program was written to provide a convenient place for a teacher to store the scores obtained by students on classroom tests. Up to 40 students may be recorded and a maximum of 10 test scores recorded. An 11th test result area is available for the teacher to automatically record a weighted composite score of the previously recorded scores. An editing option exists to delete a student in the case of a dropout or transfer out of the class. The teacher may also analyze each test and obtain a transformation of the raw test score to a z score (mean of zero and standard deviation of 1), a T score (mean of 50 and a standard deviation of 10) and a percentile rank score. The analysis of a test also permits the teacher to specify "cutting" scores for the automatic assignment of letter grades to the students. Grades may be assigned on a 5 point scale (A, B, C, D or F) or on the basis of a 12 point scale (A, A-, B+, B, B-, C+, C, C-, D+, D, D- or F.) The teacher can, of course, cancel this option and directly place grades in the column provided in the gradebook. The gradebook can be saved and re-opened at the pleasure of the student. The teacher can also create individual student reports for distribution to the students or create a class list of all student scores.

The Gradebook Form

Shown below is the gradebook form which appears when the user selects Grade Book from the Measurement menu:



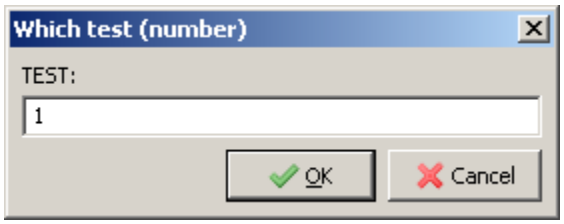
A sample grade book is included in the sample data files for LazStats. If you click on the Files menu, you can select this file and see the results below:

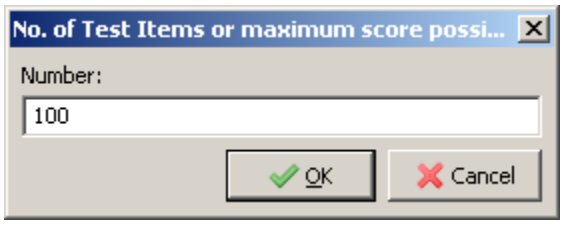


Notice that there is an area which displays the current file name. Grade Book files have a suffix label of .GBK. The current example file name is textgradebook.GBK and contains three tests for 18 students. There is also a weighted composite of scores toward the end of the data grid. Drag the "slider" bar to the right to see or record scores. You will notice a "Name Protection" box which can be turned on or off. If you turn it on, the student names will stay visible when you slide the test score grid to the right.

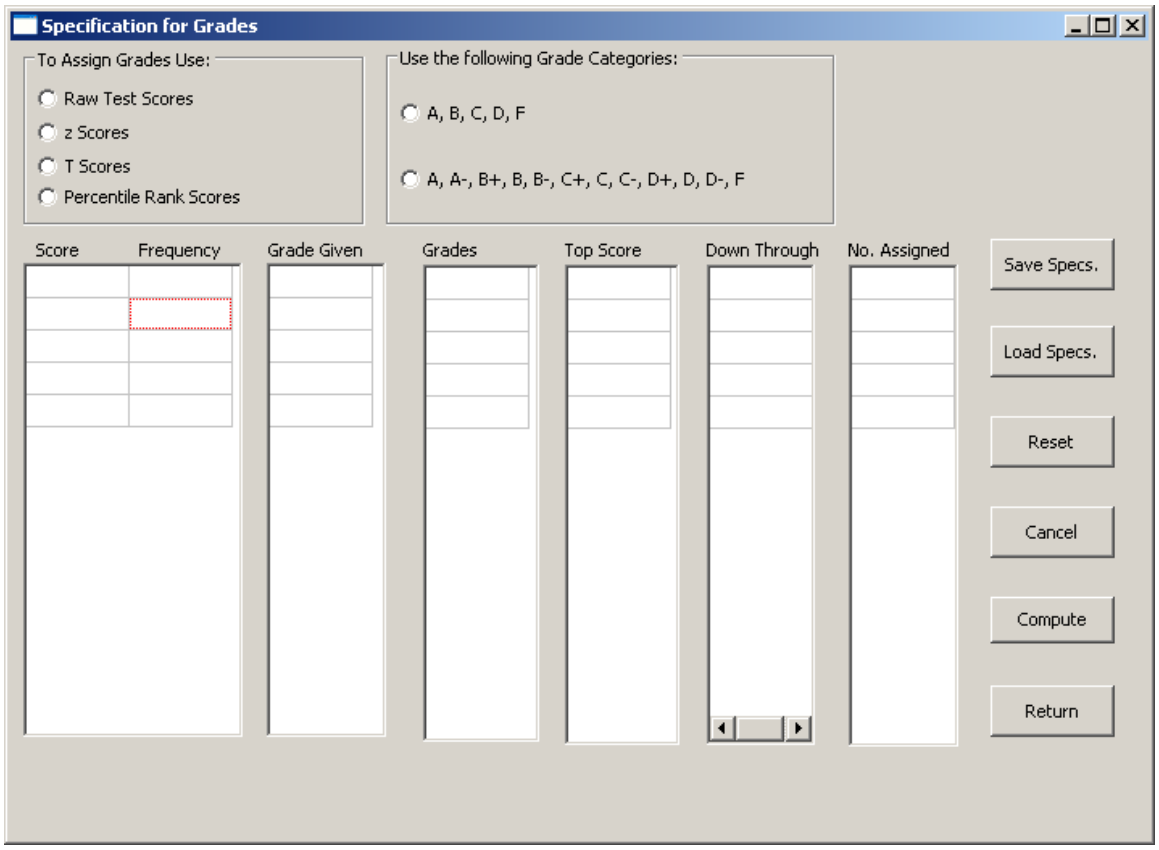
The Compute Analysis Option

There are two options under the Compute menu. The first is to analyze a test and the second is to obtain a weighted composite of two or more recorded test scores. If the user selects the analysis option, the following forms appears:



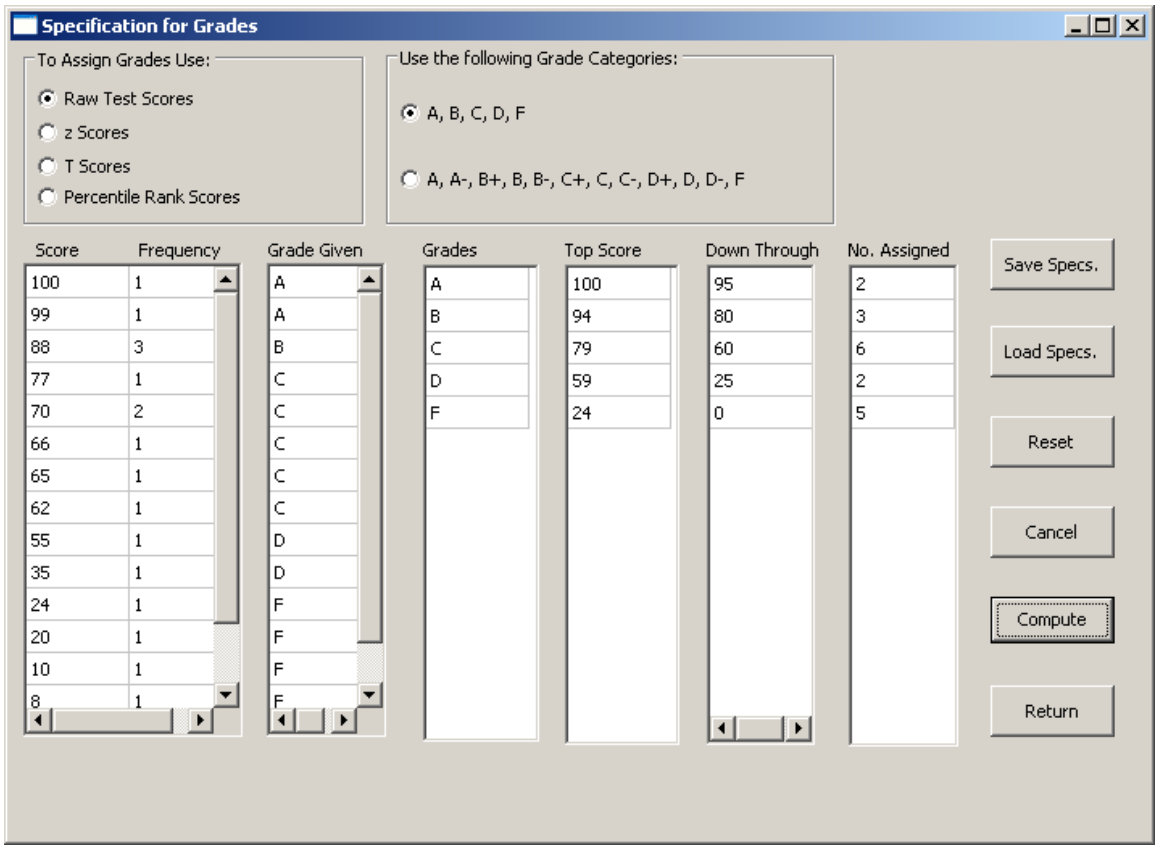


The first form is used to enter the number of the test to analyze. The second form is to indicate the number of items in the test (or maximum test score possible.) This information is used to estimate the test reliability using the Kuder-Richardson formula 21 and to identify the top score when assigning grades to the students. Once these two forms are entered with the required data, the form below appears:



The user can use this form to assign student grades on the basis of a raw score (typical) or on the basis of one of the transformation scores. The user can also assign grades on either a 5 point or a 12 point scale. First click the type of score to use. Next click the button for the number of letter grades to use. At this point the maximum score will be shown in the column marked "Top Score". The user then clicks on the corresponding space under the "Down Through" column and enters the low score for the first grade category. The "Enter" key must be pressed to record this low score. When the low score is entered, the program calculates the number of students that will receive that grade. The top score for the next grading category will also appear automatically in the "Top Score" column. This process is repeated for each grade category. When the last grade category has been entered, the user may then click the "Compute" button to automatically record the obtained grades in the Grade Book.

The following image shows an example of grading the first test in the example grade book. Notice that the grid on the far left contains the sorted scores in one column and the frequency of those scores in the second column. This provides a useful guide when selecting the cutting scores for the grades.



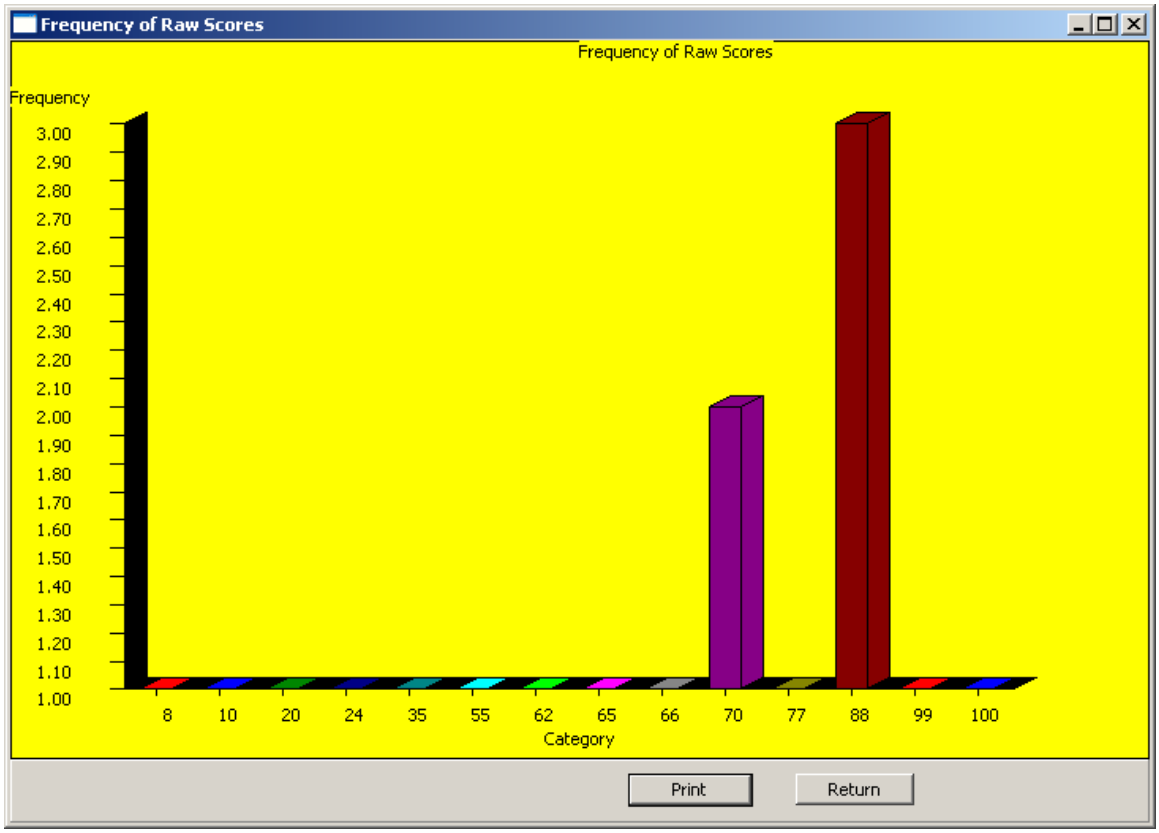
When you click the compute button, the grades are automatically recorded in the gradebook. The form above will also show the grades given to each score. Upon clicking the Return button, the following results are displayed:

Test Analysis Results
Mean = 56.94, Variance = 1071.114, Std.Dev. = 32.728

Kuder-Richardson Formula 21 Reliability Estimate = 0.9870

PERCENTILE RANKS

Score Value	Frequency	Cum.Freq.	Percentile Rank
0.000	1.00	1.00	2.78
8.000	1.00	2.00	8.33
10.000	1.00	3.00	13.89
20.000	1.00	4.00	19.44
24.000	1.00	5.00	25.00
35.000	1.00	6.00	30.56
55.000	1.00	7.00	36.11
62.000	1.00	8.00	41.67
65.000	1.00	9.00	47.22
66.000	1.00	10.00	52.78
70.000	2.00	12.00	61.11
77.000	1.00	13.00	69.44
88.000	3.00	16.00	80.56
99.000	1.00	17.00	91.67
100.000	1.00	18.00	97.22


Frequency of Raw Scores
Frequency of Raw Scores
Frequency
3.00
2.90
2.80
2.70
2.60
2.50
2.40
2.30
2.20
2.10
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
8
10
20
24
35
55
62
65
66
70
77
88
99
100
Category
Print
Return