DECUS
PROGRAM LIBRARY

DECUS NO.	FOCAL8-77
TITLE	MARX: A GRADING PROGRAM
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SOURCE LANGUAGE	FOCAL

MARX: A GRADING PROGRAM

ABSTRACT

This program accepts marks for a class of a given number, for a given number of weighted quizzes and tests, and outputs in tabular form, the students' respective ranks, averages, and relation to the class average (plus or minus, as the case may be). In addition, it gives the class average, and a table showing the distribution of averages along a scale from flunk (below 6∅) to 1∅∅.

Execution time is mostly governed by the speed of the ASR-33, however, there are several pauses during the printout, which vary in length depending on the number of students and the speed of the computer itself.

OPERATION

Upon starting, the program will ask for the number of students, the number of marks per student, and how each mark is to be weighted. In weighing marks, any positive numbers may be used, although care should be taken to see that the scalers are entered in the proper order. (i.e. the first scales entered is assigned to the first marks, the second to the second marks, etc.).

The computer will then type "STUDENT NO. = 1," and a colon. Enter the marks here for the first student, separated by spaces. After the correct number of marks have been entered for the first student, the computer will type a CR/LF and then ask for student No. 2's marks in the same way as above. When all students' marks have been entered, printout will commence, punctuated by occasional pauses.

See sample run for complete operational rundown.

NO. OF STUDENTS:40
NO. OF GRADES PER STUDENT:5
SCALE OF GRADES
:1 :2 :1.5 :2.5 :4

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STUDENT NO. =  1    :75 :72 :83 :75 :71
STUDENT NO. =  2    :83 :81 :80 :77 :73
STUDENT NO. =  3    :72 :69 :77 :74 :90
STUDENT NO. =  4    :86 :83 :88 :74 :71
STUDENT NO. =  5    :88 :86 :83 :77 :72
STUDENT NO. =  6    :75 :79 :84 :77 :78
STUDENT NO. =  7    :88 :84 :81 :90 :88
STUDENT NO. =  8    :99 :99 :99 :99 :00
STUDENT NO. =  9    :95 :83 :81 :82 :77
STUDENT NO. = 10    :75 :73 :71 :65 :62
STUDENT NO. = 11    :99 :85 :82 :86 :88
STUDENT NO. = 12    :74 :78 :72 :69 :80
STUDENT NO. = 13    :85 :81 :84 :83 :87
STUDENT NO. = 14    :80 :70 :60 :50 :40
STUDENT NO. = 15    :84 :82 :55 :74 :71
STUDENT NO. = 16    :85 :81 :88 :84 :89
STUDENT NO. = 17    :69 :68 :62 :55 :74
STUDENT NO. = 18    :85 :83 :97 :82 :84
STUDENT NO. = 19    :99 :94 :92 :86 :77
STUDENT NO. = 20    :81 :77 :74 :71 :90
STUDENT NO. = 21    :84 :81 :90 :75 :72
STUDENT NO. = 22    :63 :61 :68 :65 :63
STUDENT NO. = 23    :77 :73 :75 :71 :79
STUDENT NO. = 24    :83 :84 :81 :77 :73
STUDENT NO. = 25    :79 :75 :78 :77 :77
STUDENT NO. = 26    :73 :71 :77 :74 :70
STUDENT NO. = 27    :80 :84 :81 :81 :82
STUDENT NO. = 28    :75 :68 :74 :88 :60
STUDENT NO. = 29    :77 :74 :71 :79 :75
STUDENT NO. = 30    :88 :84 :71 :70 :74
STUDENT NO. = 31    :84 :81 :85 :77 :50
STUDENT NO. = 32    :74 :83 :71 :70 :70
STUDENT NO. = 33    :74 :71 :68 :74 :77
STUDENT NO. = 34    :90 :71 :71 :74 :69
STUDENT NO. = 35    :84 :81 :88 :87 :77
STUDENT NO. = 36    :75 :72 :71 :50 :50
STUDENT NO. = 37    :83 :81 :85 :00 :00
STUDENT NO. = 38    :73 :71 :77 :74 :79
STUDENT NO. = 39    :80 :85 :82 :81 :86
STUDENT NO. = 40    :74 :71 :75 :73 :72
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NUMBER	RANK	AVERAGE	+OR- CLASS AVERAGE
= 1	= 25	= 74.091	=- 0.547
= 2	= 18	= 77.227	= 2.590
= 3	= 12	= 79.136	= 4.499
= 4	= 17	= 77.546	= 2.908
= 5	= 13	= 78.636	= 3.999
= 6	= 14	= 78.500	= 3.863
= 7	= 2	= 86.773	= 12.135
= 8	= 37	= 63.000	=- 11.637
= 9	= 10	= 81.409	= 6.772
= 10	= 34	= 67.091	=- 7.547
= 11	= 1	= 87.182	= 12.545
= 12	= 22	= 75.500	= 0.863
= 13	= 6	= 84.409	= 9.772
= 14	= 39	= 54.091	=- 20.547
= 15	= 28	= 72.682	=- 1.956
= 16	= 4	= 85.909	= 11.272
= 17	= 35	= 66.500	=- 8.137
= 18	= 5	= 85.227	= 10.590
= 19	= 3	= 86.182	= 11.545
= 20	= 11	= 80.318	= 5.681
= 21	= 16	= 77.864	= 3.226
= 22	= 36	= 63.773	=- 10.865
= 23	= 23	= 75.364	= 0.726
= 24	= 15	= 77.909	= 3.272
= 25	= 19	= 76.955	= 2.317
= 26	= 31	= 72.318	=- 2.319
= 27	= 9	= 81.818	= 7.181
= 28	= 32	= 71.091	=- 3.547
= 29	= 23	= 75.364	= 0.726
= 30	= 20	= 75.773	= 1.135
= 31	= 33	= 69.636	=- 5.001
= 32	= 27	= 72.864	=- 1.774
= 33	= 26	= 73.727	=- 0.910
= 34	= 28	= 72.682	=- 1.956
= 35	= 8	= 82.136	= 7.499
= 36	= 38	= 59.136	=- 15.501
= 37	= 40	= 33.864	=- 40.774
= 38	= 21	= 75.591	= 0.954
= 39	= 7	= 83.591	= 8.954
= 40	= 30	= 72.636	=- 2.001

CLASS AVERAGE = 74.637