

CISC 1110 (Science Section)
Professor Langsam

Assignment #6

You have found a job at the Brooklyn College CIS Department. Your assignment is to tabulate the grades of the *Introduction to C++* course. Each student submits 4 HWs, takes two examinations and a final. The final grade is computed as:

$$\text{FinalAverage} = 30\% \text{ of the average of the HWs} + 30\% \text{ of the average of the two examinations} + 40\% \text{ of the Final}$$

Assume there are no more than 50 students in each section. Data can be found in a file called `grades.txt`. Your output should resemble the following:

CISC 1110 – GRADE ROSTER

Name	HW1	HW2	HW3	HW4	Exam #1	Exam #2	Final	Average	Grade
John	100	95	70	80	82	74	71	78	C
Sally	85	80	95	90	74	48	89	80	B
Mary	80	85	75	0	34	12	25	35	F
Joan	100	100	100	90	101	92	99	98	A
Mark	100	85	95	85	53	38	69	69	D
Average	93	89	87	69	69	53	71	72	

Skip five lines and for each student print the student's highest HW grade, the student's highest exam grade, and the student's lowest grade (of all). Sample output would resemble the following:

Name	Highest HW	Highest Exam	Lowest Grade
John	100	82	70
Sally	95	74	48
Mary	85	34	0
Joan	100	101	90
Mark	100	53	38

Skip another five lines and print the student's name who has the highest average, followed by the student who has the lowest average.

Skip another five lines and reprint the original table in *alphabetical order*.

All tables are to be printed with headings. Be sure to use meaningful variables and use the structured programming techniques we learned in class. You may not use global variables and you should design your program using top-down programming techniques (i.e. use functions with parameters to do all the work.)