

Assignment No. 1

To refresh your C programming skills, the following programming assignment is selected from the C programming prerequisite course that you have already taken.

Seven students are enrolled in a program at the end of which they have to take exams in two different subjects. They receive a diploma if they pass both subjects. The passing score in each subject is 50 or higher, and the scores are:

STUDENT NAME	STUDENT NO.	SUBJECT A	SUBJECT B
JOAN	1	70.5	85
TANIA	2	49	75
TOM	3	53	54
JEFF	4	80	49.5
SUSAN	5	89	90
KATHY	6	99	55
RAYMOND	7	22.5	75

The above information is saved in a data file that you need to create. Write a C program to read the above information from a data file and do the following steps:

- Calculate who obtained the diploma (Identity names, grades).
- Arrange subject A in ascending order (you should identify student name, student ID and subject B).
- Calculate the average and standard deviation of each subject.

YOUR PROGRAM SHOULD CONTAIN PROGRAMMING MODULES (FUNCTIONS) and have a easy to use interface.

- The above given data should be read from an external file. Also, your output should be displayed on the screen as well as copied to an external file.

Note: Your program should be properly commented and you need to have a typed up cover page, indicating Course, Program No., Your Name, and the actual date submitted.

You can use C running on your laptop or use one the University machines. Whichever machine you use, you should be able to demo it to me using your laptop.