

1. Write the shell script to perform following operation.

(i) Display the count of number of students with 'F' grade in the terminal.

(ii) Modify all the occurrence of 'A' grade with 'A+' grade and display in the terminal.

The input file (eg: gradesheet.txt) must be passed as a command line argument. Write the complete working code along with the command to execute the script. [5 marks]

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Sample input file (gradesheet.txt) content:

Roll No	Name	Grade
1	Joe	C
2	Milan	A
3	Peter	F
4	Tony	F
5	James	A

Sample output:

(i) Number of Student details with 'F' grade: 2

(ii) Modify all the occurrence of 'A' grade with 'A+' grade

Roll No	Name	Grade
1	Joe	C
2	Milan	A+
3	Peter	F
4	Tony	F
5	James	A+

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2. Write a complete program to create two threads A, B. The thread A displays message "inside thread A" only after the thread B displays "inside thread B". The main thread has to wait until both the messages are displayed. Use semaphores to maintain the order of execution of messages.[5 marks]