

[C] Write a menu driven program which has following options:

1. Factorial of a number
2. Prime or not
3. Odd or even
4. Exit

Once a menu item is selected the appropriate action should be taken and once this action is finished, the menu should reappear. Unless the user selects the 'Exit' option the program should continue to run.

Hint: Make use of an infinite **while** and a **switch** statement.

[D] Write a program to find the grace marks for a student using **switch**. The user should enter the class obtained by the student and the number of subjects he has failed in. Use the following logic:

- If the student gets first class and the number of subjects he failed in is greater than 3, then he does not get any grace. Otherwise the grace is of 5 marks per subject.
- If the student gets second class and the number of subjects he failed in is greater than 2, then he does not get any grace. Otherwise the grace is of 4 marks per subject.
- If the student gets third class and the number of subjects he failed in is greater than 1, then he does not get any grace. Otherwise the grace is of 5 marks.