Lab 06 Tasks

Q1. Define an integer array of 10 elements

int marks[10]={2,6,9,7,5,4,2,5**,**9,8**};**

Now access al the even numbered elements in the array and print the factorial of the elements. Next, access al the odd numbered elements in the array and print the square of the elements.

Factorial of a number is the product of the all the numbers from 1 to the number itself. For example, the factorial of 6 is 1x2x3x4x5x6 = 720. Write a separate function that will perform the factorial operation.

Sample output:

Even Numbered Elements:			Odd Numbered Elements:		
Name	value	factorial	Name	value	Square
marks[0]	2	2	marks[1]	6	36
marks[2]	9	362880	marks[3]	7	49
marks[4]	5	120	marks[5]	4	16
marks[6]	2	2	marks[7]	5	25
marks[8]	9	362880	marks[9]	8	64

Q2. Write a program that will take characters as input from the user and store them in an array. The valid inputs will be the alphabets and the program will stop taking input when any other type of character is given as input. Now the program will check if the input string is palindrome or not.

Palindrome is a string that has a particular characteristic. If we divide a palindrome into two halves, one half will be an exact mirror image of the other. For example: **abcba**, **ghhg**.

Q3. Write a program that will take positive integer values as input and store them in an array. It will stop taking input for any negative value or zero. Now the program will print how many times each of the input number occurs.

Sample Input:	**Sample Output:**
3 4 5 7 8 9 1 2 3 3 4 4 5 6 0	3 occurs 3 times 4 occurs 3 times 5 occurs 2 times 7 occurs 1 time 8 occurs 1 time 9 occurs 1 time 2 occur 1 time