

The lecture notes are allowed during the assignment. Student needs to comment in detail for all C code.

Question 1: (10 points)

Write a C program to find the maximum and minimum of 4 input integer numbers. Then, check whether these maximum and minimum number are prime number or not ***using function.***

Requirement:

- The 4 integer number input by user;
- Show the maximum number, minimum number and then check prime number or not.

Question 2: (10 points)

Write a program in C to find the sum of the series $1!/1 + 2!/2 + 3!/3 + 4!/4 + 5!/5 + \dots + n!/n$ where n is an inputted integer by user using the ***factorial function.***

Question 3: (10 points)

Write a C Program to Convert a Given Number of Days in terms of Years, Weeks & Days (assume that 365 days per year) ***using function.***

Question 4: (15 points)

Write a C Program to Convert the given Binary Number into Decimal and then convert the output binary again to decimal number ***using function.***

Question 5: (10 points)

Write a C program to calculate sum & average of an integer array with N elements?

Question 7: (15 points)

Write a C program to print the frequency of the total points (sum of two faces) when the user rolls two dices by 5000 times.

Question 8: (15 points)

Write a C program to sort elements of an integer array in ascending and descending order using bubble sort and selection sort algorithms.

Question 9: (15 points)

Write a program in C to find the sum of the right diagonals of a matrix.

Input the size of the square matrix : 2

Input elements in the first matrix :

element - [0],[0] : 1

element - [0],[1] : 2

element - [1],[0] : 3

element - [1],[1] : 4

Expected Output :

The matrix is :

1 2

3 4

Addition of the right Diagonal elements is :5

End