Practical work _N° 05

Exercise N° 01:

Question 01: Write a C program to find sum of natural numbers from 1 to N using *for* loop.

Question 02: Write a C program to find sum of natural numbers from 1 to N using *while* loop.

Exercise N° 02:

Question 01: Write a C program to print all natural numbers from 1 to N using *for* loop.

Question 02: Write a C program to print all natural numbers from 1 to N using *while* loop.

Question 03: Write a C program to print all natural numbers from 1 to N using *do while* loop.

Exercise N° 03:

Question 01: Write a C program to print all even numbers from 1 to N using loops.

Question 02: Write a C program to print all odd numbers from 1 to N using loops.

Exercise N° 04:

Question 01: Write a C program to find sum of all even numbers between 1 to N using *for* loop.

Question 02: Write a C program to find sum of all even numbers between 1 to N using *while* L..

Exercise N° 05:

Question 01: Write a C program to input N numbers from user and find sum of all even numbers using loops.

Exercise N° 06:

Question 01: Write a C program that prompts the user to enter N integers and then calculates and prints the number of even and odd numbers using a do-while loop.

Question 02: Write a C program that repeatedly asks the user to enter a positive number and calculates the sum of all positive numbers entered. The program should stop when the user enters a negative number.

Exercise N° 07:

Question 01: Write a C program to print all natural numbers in *reverse* from N to 1 using *for* Loop.

Question 02: Write a C program to print all natural numbers in *reverse* from N to 1 using *while* L..

Question 03: Write a C program to print all natural numbers in *reverse* from N to 1 using *do while* L..

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Exercise N° 08:

Question: Write C programs to display each of the following patterns.

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*           |   1           |   1 2 3 4 5
* *         |   1 2         |     1 2 3 4
* * *       |   1 2 3       |       1 2 3
* * * *     |   1 2 3 4     |         1 2
* * * * *   |   1 2 3 4 5   |           1
```

Exercise N° 09:

Question: Write a C program to find and print the factorial of a given number using for Loop.

In this problem, you have to write a program to calculate the factorial (product of all the natural numbers less than or equal to the given number n) of a number entered by the user.

Remark: A factorial is denoted by "!". So, suppose, you want to find the factorial of the number n, then n! = n * (n-1) * (n-2) * (n-3) … *.

Exercise N° 10:

Question: Write a C program to calculate and print the factorial of numbers from 1 to n.

In this problem you can do a nested loop, where you have to write a program to calculate the factorial of numbers from 1 to n entered by a parent loop from 1 to n, and the nested loop will be your already working for loop.

Exercise N° 11:

Question: Write a C program to print Fibonacci series up to 100.

Logic: Initialize first and second number as 0 and 1 Print the first and second number third number will be sum of first and second Fourth number will sum of second and third and so on.

Remark: Fibonacci Series is a series of numbers are integer number sequence. First two numbers are 0 and 1, and every next number is an addition or sum of previous two numbers.