

Lab # 8

(Loops in C)

Task1

- Write a program using while loop that keeps asking the user to enter a number until -1 is entered.
- Then displays the number values entered, the sum of all the entered numbers and its average.

Task2

- Write a program using while loop that asks a user to enter the total number of students enrolled in Computer Programming class.
- Then asks the user to enter the marks obtained by each student in this class.
- Display the average marks obtained.

Task3

- Write a program which computes the factorial of a positive integer using do-while loop.
- N factorial is: $n! = (n)(n-1)(n-2)....(3)(2)(1)$

Task4

- Write a program using do-while loop that prints the first 20 odd numbers which are not divisible by 3.

Task5

- Write a program using for loop which displays the table of entered number. (1-20)

Task6

Use for loop to make the following shape:

```
* * * * *
* * * * *
* * * *
* * *
* *
*
*
```

Note: use only one * with print.

Task7

Write a program using for loop which displays all the prime numbers from 50 to 100.

Home Tasks

Task8

Make the following shape using for loop:

```
  *
 * * *
* * * * *
 * * *
  *
```

Challenge: use only one * with print.

Task 9

Write a program to check whether a number is a palindrome or not.

Task 10

Write a program which breaks down an integer in segments and display each digit of the integer in new line.