

Course  
&  
Test Series

 CBSE

 ICSE

 NTSE

 Banking &  
Insurance

 Central Govt.  
Service

 State Govt.  
Services

 LAW  
Entrance

 MBA  
Entrance

 Railways & Metro  
Services

...many more

abhyasonline.in

Self-Made Assignment - C Language

While Loop in C Language

Task: Count the Number of Digits in a Number

Objective:

Write a C program that uses a while loop to count how many digits are in a positive integer entered by the user.

Problem Description:

Your program should:

1. Ask the user to enter a positive integer.
2. Use a while loop to count how many digits the number has.
3. Print the total digit count.

Resultant Output

Output

```
Enter a positive integer: 4357  
The number of digits is: 4
```

Hint for Students:

- Divide the number by 10 in each iteration:  $\text{num} = \text{num} / 10$
- Use a counter variable to keep track of how many times the loop runs
- Stop when num becomes 0
- Handle the special case when the number is 0 (it has 1 digit)