

Aim:

Write a program to find the **sum of individual digits** of a given number.

At the time of execution, the program should print the message on the console as:

Enter an integer :

For example, if the user gives the **input** as **1234** :

Enter an integer : 1234

then the program should **print** the result as:

The sum of digits of the given number 1234 = 10

Note: Do use the **printf()** function with a **newline** character (**\n**) at the end.

Source Code:

LoopExample4.c

```
#include<stdio.h>
int main()
{
    int n,n1,sum=0,res;
    printf("Enter an integer : ");
    scanf("%d",&n);
    n1=n;
    while(n1!=0)
    {
        res=n1%10;
        sum=sum+res;
        n1=n1/10;
    }
    printf("The sum of digits of the given number %d = %d\n",n,sum);
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter an integer : 345
The sum of digits of the given number 345 = 12
Test Case - 2
User Output
Enter an integer : 6543
The sum of digits of the given number 6543 = 18
Test Case - 3

User Output
Enter an integer : 96584
The sum of digits of the given number 96584 = 32