S.No: 16	Exp. Name: *Write a C program to find the Sum of individual digits of a given number*	Date:2023-01-07

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

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