<u>Aim:</u>
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:

Exp. Name: Write a C program to find the Sum of individual digits of a given

```
Enter an integer :
```

number

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 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