```c
#include<stdio.h>
void main()
{
  int n,temp,sum=0;
  printf("Enter the digit :");
  scanf("%d",&n);
  while(n>0)
  {
    temp= n%10;
    sum=sum+temp;
    n=n/10;
  }
  printf("sum of number :%d",sum);
}
```

Compile Result

```
Enter the digit :122
sum of number :5
[Process completed (code 16) - press
 Enter]
```

Program to find sum of digits of a number

Algorithm

1. Start

2. Initilize sum = 0

3. Read the value of n

4. while (n>0) # if (n>0) condition becomes false
   goto step 6

4.1. temp=n %10;

4.2. sum = sum + temp;

4.3 n = n/10

5. Repeat the steps until the condition becomes false

6. Print the sum of the digits

7. Stop.

```
          Start
            ↓
      Initialize
       Sum = 0
            ↓
     Read the value
         of n
            ↓
  while n > 0  ─────────────────┐
            ↓                   │
  temp = n % 10          Print the sum
  sum = Sum + temp        of the digit
  n = h / 10.                   │
       Stop ───────────────────┘
```