printf() and scanf() in C

The printf() and scanf() functions are used for input and output in C language. Both functions are inbuilt library functions, defined in stdio.h (header file).

printf() function

The **printf() function** is used for output. It prints the given statement to the console.

The syntax of printf() function is given below:

1. printf("format string",argument\_list);

The **format string** can be %d (integer), %c (character), %s (string), %f (float) etc.

scanf() function

The **scanf() function** is used for input. It reads the input data from the console.

1. scanf("format string",argument\_list);

Program to print cube of given number

Let's see a simple example of c language that gets input from the user and prints the cube of the given number.

1. #include<stdio.h>
2. **int** main(){
3. **int** number;
4. printf("enter a number:");
5. scanf("%d",&number);
6. printf("cube of number is:%d ",number\*number\*number);
7. **return** 0;
8. }

**Output**

enter a number:5

cube of number is:125

The **scanf("%d",&number)** statement reads integer number from the console and stores the given value in number variable.

The **printf("cube of number is:%d ",number\*number\*number)** statement prints the cube of number on the console.

Program to print sum of 2 numbers

Let's see a simple example of input and output in C language that prints addition of 2 numbers.

1. #include<stdio.h>
2. **int** main(){
3. **int** x=0,y=0,result=0;
5. printf("enter first number:");
6. scanf("%d",&x);
7. printf("enter second number:");
8. scanf("%d",&y);
10. result=x+y;
11. printf("sum of 2 numbers:%d ",result);
13. **return** 0;
14. }

**Output**

enter first number:9

enter second number:9

sum of 2 numbers:18