

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:

```
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.

```
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.

```
#include<stdio.h>
int main(){
int number;
printf("enter a number:");
scanf("%d",&number);
printf("cube of number is:%d ",number*number*number);
return 0;
}
```

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 number

```
#include<stdio.h>
int main()
{
    int x=0,y=0,result=0;
    printf("enter first number:");
    scanf("%d",&x);
    printf("enter second number:");
    scanf("%d",&y);
    result=x+y;
    printf("sum of 2 numbers:%d ",result);
    return 0;
}
```

Output

```
enter first number:9
enter second number:9
sum of 2 numbers:18
```