1. **Input and Output instruction in C.**

An instruction which is used to print something on the screen or any other output device is known as output instruction. Similarly, an instruction which is used to input information from the user is known as input instruction.

Standard Input and output device.

Standard Input device is keyboard and standard output device is monitor. we can give input through mouse and scanner and take output through printer and sound.

Printf();

* Printf() function is a inbuilt library function. Which is declared in “stdio.h” header file.
* Printf() function is used to print any type of messages and value on the console.
* Printf() is not a keywords.
* Printf() is a predefine function.

We can print two type of massage on monitor through printf() function.

1. Print text as it is.
2. Pint value of expression or value of variable.

Example

#include<stdio.h>

int main()

{

Int a =4, b =5;

Printf(“8”);\\ as it is 8

Printf(“%d%d”,a,b);\\ 4 and 5

Printf(“a=%d b=%d”,a,b)\\;a=4, b=5

Printf(“sum of %d %d is %d”a,b,a+b);\\ sum of 4 and 5 is 9

getch();

return 0;

}

**Scanf();**

* Scanf() function is used to take input from the user and store the data in the variable.
* scanf() is not a keywords.
* scanf() is a predefine function.

syntax

scanf(“ format specifier ”, variable address);

%d, %f, %c… &x, &y…

Use of scanf();

#include<stdio.h>

int main()

{

    int a,b, sum;

    printf("enter the value of a and b");

    scanf("%d%d", &a,&b);

     sum = a+b;

    printf("sum= %d",sum);

    return 0;

*// in this program scanf() function take value of a and b from the user.*

}

LIST OF PREDEFINE FUNCTION

Clrscr();

We can clear console screen/output screen through the clrscr() predefine function.

Printf();

We can print massage on console screen/output screen through the printf() predefine function.

getch();

It is watting for take a keyword not for hold output screen.

Scanf();

LIST OF escape sequences

* /n = It is use to break the line.
* /t =
* /b

LIST OF format specifier

Format specifier is used to print the value of variable or value of expression

* %f = float. (f represent fractional number)
* %d = int. (d represent decimal number)
* %c = char.
* %Lf= double.

1. **Input and Output instruction in C++.**

*// <iostream> is a harder file. it contains the declaration of cout and cin object and << and >> operator.*

#include<iostream>

using namespace std;

int main()

{

*//INTPUT INSTRUCTION IN C++.*

*/\* cin is a predefine object not a function. it is use to take input data from Keyboard. we have to use extration or get from operator(<<).\*/*

*//EXAMPLE :- 1*

int a,b,c;

*// In C we have to mention specifier(%d, %f, %c) according to data type for taking input data from Keyboard.*

printf("Enter two number\n");*// we use \n for new line in C language*

scanf("%d %d",&a,&b);

*/\* But in C++ we have not to mention specifier (%d, %f, %c) according to data type for taking input data from Keyboard.we have just put the variable name in place of specifier.\*/*

cout<< "Enter two number"<<endl;*// we use endl for new line in C++ language.*

cin>>a>>b;

return 0;

}

#include<iostream>

using namespace std;

int main()

{

*//OUTPUT INSTRUCTION IN C++.*

*/\* Cout is a predefine object not a function . it is use to send data or massage to monitor. we have*

*to use insertion(<<) or put to operator with cout object for inserting any massage in output stream.\*/*

*//EXAMPLE :- 1*

*// We can also use printf() function to print something on monitor because C++ support everything which is exist in C.*

printf("Hello World\n");*// \n is use for*

*// We use cout object to print something on monitor in C++.*

cout<<"Hello Anurag"<<endl;

*//EXAMPLE :- 2*

int a=10, b=30,c;

c=a+b;

*// In C we have to mention specifier(%d, %f, %c) according to data type to print value of  variable.*

printf("sum of %d and %d is %d\n",a,b,c);

*/\* But in C++ we have not to mention specifier(%d, %f, %c) according to data type to print value of variable.*

*we have just put the variable name in place of specifier.\*/*

cout<<"sum of "<<a<<" and " <<b<<" is " <<c;

*//EXAMPLE :- 3*

int d=10,e=20;

printf("\n%d\n",d\*e);

cout<<d\*e;

return 0;

}