Lesson 31 CPP Constructor

It is sometimes convenient if an object can initialize itself when it is first created, without the need to make a separate call to member functions.

Automatic initialization is carried out using special member functions called **constructors**.

A Constructor is a special member function that is called automatically when an object is created.

The purpose of a constructor is to mainly initialize the member variables of a class.

Characteristics of Constructor:

- The name of the constructor is the same as the name of the class.
- A Constructor, even though it is a function, has no return type, i.e. it is neither a value-returning function nor a void function.
- The constructor should be declared in the public section.
- Constructors are executed automatically i.e. they are never invoked. They are executed when a class object is created.

Example:

Program to demonstrate how a constructor is used to initialize data members of an object.

```
#include<iostream.h>

#include<conio.h>
```

```
class Number
{
private:
int a;
public:
        Number ( )
        {
                cout<<"I am in the Constructor";
                a = 100;
        }
        void display( )
        {
                cout<<"Value of a is ="<<a;
        }
        };
        void main( )
        {
                Number N;
                N.display;
}
```

OUTPUT:

I am in the Constructor

Value of a is = 100