Constructor

### C++ Constructor

In C++, constructor is a special method which is invoked automatically at the time of object creation. It is used to initialize the data members of new object generally. The constructor in C++ has the same name as class or structure.

There can be two types of constructors in C++.

Default constructor  
Parameterized constructor

##### C++ Default Constructor

A constructor which has no argument is known as default constructor. It is invoked at the time of creating object.

Let’s see the simple example of C++ default Constructor.

#include <iostream>   
using namespace std;   
class Employee   
 {   
 public:   
 Employee()   
 {   
 cout<<"Default Constructor Invoked"<<endl;   
 }   
};   
int main(void)   
{   
 Employee e1; //creating an object of Employee   
 Employee e2;   
 return 0;   
}

Output

Default Constructor Invoked   
Default Constructor Invoked

##### C++ Parameterized Constructor

A constructor which has parameters is called parameterized constructor. It is used to provide different values to distinct objects.

Let’s see the simple example of C++ Parameterized Constructor.

#include <iostream>  
using namespace std;  
class Employee {  
 public:  
 int id;//data member (also instance variable)   
 string name;//data member(also instance variable)  
 float salary;  
 Employee(int i, string n, float s)   
 {   
 id = i;   
 name = n;   
 salary = s;  
 }   
 void display()   
 {   
 cout<<id<<" "<<name<<" "<<salary<<endl;   
 }   
};  
int main(void) {  
 Employee e1 =Employee(101, "Sonoo", 890000); //creating an object of Employee   
 Employee e2=Employee(102, "Nakul", 59000);   
 e1.display();   
 e2.display();   
 return 0;  
}

Output

101 Sonoo 890000  
102 Nakul 59000