

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 struct.

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.

C# Default Constructor Example: Having Main() within class

```
using System;

public class Employee
{
    public Employee()
    {
        Console.WriteLine("Default Constructor Invoked");
    }

    public static void Main(string[] args)
    {
        Employee e1 = new Employee();
        Employee e2 = new Employee();
    }
}
```

Output:

```
Default Constructor Invoked
Default Constructor Invoked
```

C# Default Constructor Example: Having Main() in another class

Let's see another example of default constructor where we are having Main() method in another class.

```
using System;

public class Employee
{
    public Employee()
    {
        Console.WriteLine("Default Constructor Invoked");
    }
}

class TestEmployee{
    public static void Main(string[] args)
    {
        Employee e1 = new Employee();
        Employee e2 = new Employee();
    }
}
```

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.

```
using System;
```

```
public class Employee
{
    public int id;
    public String name;
    public float salary;
    public Employee(int i, String n,float s)
    {
        id = i;
        name = n;
        salary = s;
    }
    public void display()
    {
        Console.WriteLine(id + " " + name+" "+salary);
    }
}

class TestEmployee{
    public static void Main(string[] args)
    {
        Employee e1 = new Employee(101, "Sonoo", 890000f);
        Employee e2 = new Employee(102, "Mahesh", 490000f);
        e1.display();
        e2.display();

    }
}
```

Output:

```
101 Sonoo 890000
102 Mahesh 490000
```