

Inheritance

```
using System;

namespace Tut3
{
    public class User
    {
        public string Name;
        private string Location;
        public User()
        {
            Console.WriteLine("Base Class Constructor");
        }
        public void GetUserInfo(string loc)
        {
            Location = loc;
            Console.WriteLine("Name: {0}", Name);
            Console.WriteLine("Location: {0}", Location);
        }
    }
    public class Details: User
    {
        public int Age;
        public Details()
        {
            Console.WriteLine("Child Class Constructor");
        }
        public void GetAge()
        {
            Console.WriteLine("Age: {0}", Age);
        }
    }
    class Program
    {
        static void Main(string[] args)
        {
            Details d = new Details();
            d.Name = "Suresh Dasari";
            // Compile Time Error
            //d.Location = "Hyderabad";
            d.Age = 32;
            d.GetUserInfo("Hyderabad");
            d.GetAge();
            Console.WriteLine("\nPress Any Key to Exit..");
        }
    }
}
```

```
        Console.ReadLine();
    }
}
}
```

Multilevel Inheritance

```
using System;

namespace Tut4
{
    public class A
    {
        public string Name;
        public void GetName()
        {
            Console.WriteLine("Name: {0}", Name);
        }
    }
    public class B: A
    {
        public string Location;
        public void GetLocation()
        {
            Console.WriteLine("Location: {0}", Location);
        }
    }
    public class C: B
    {
        public int Age;
        public void GetAge()
        {
            Console.WriteLine("Age: {0}", Age);
        }
    }
    class Program
    {
        static void Main(string[] args)
        {
            C c = new C();
            c.Name = "Suresh Dasari";
            c.Location = "Hyderabad";
            c.Age = 32;
            c.GetName();
            c.GetLocation();
        }
    }
}
```

```

        c.GetAge();
        Console.WriteLine("\nPress Any Key to Exit..");
        Console.ReadLine();
    }
}
}

```

C# Multiple Inheritance

```

public class A
{
    // Implementation
}
public class B
{
    // Implementation
}
public class C: A, B
{
    // Implementation
}

```

error

Method Overriding

```

using System;

namespace ConsoleApp18
{
    public class employee
    {
        public int salary = 30000;

        public virtual void total()
        {
            Console.WriteLine("Employee\'s Total Salary"+salary);
        }
    }
    public class programmer : employee
    {
        public int bonus = 10000;

        public override void total()
        {
            Console.WriteLine("Employee\'s Total Salary" + salary);
            Console.WriteLine("Total Salary for programmer is:" + (bonus +salary));
        }
    }

    public sealed class developer : programmer

```

```

{
    public int bonus1 = 20000;
    public override void total()
    {
        Console.WriteLine("Employee\'s Total Salary" + salary);
        Console.WriteLine("Total Salary for programmer is:" + (bonus + salary));
        Console.WriteLine("Total Salary for developer is:" + (bonus1 + salary));
    }
}

class Program
{
    static void Main(string[] args)
    {
        // programmer p1 = new programmer();
        // p1.total();//base class method
        // p1.totbonus();//derived class method

        //Console.WriteLine(p1.salary + p1.bonus);

        developer d1 = new developer();//for the last derived class
        d1.total();
    }
}

```