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```
class MyClass
{
    public static double Average(double[] array)
    {
        double s = 0;
        foreach (double element in array)
            s += element;
        return s / array.Length;
    }
    public static void Show(double[] array)
    {
        string s = " Your array is:";
        foreach (double element in array)
            s += element.ToString()+" ";
        MessageBox.Show(s);
    }
}
```

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```
private void ButGetAverage_Click(object sender,
    EventArgs e)
{
    double[] A = { 20, 70, 50, 90, 10, 30, 60 };
    double v = MyClass.Average(A);
    MyClass.Show(A);
    MessageBox.Show("Average="+v.ToString());
}
```

Note:

You can use the keyword “params” to allow you array to be passed directly as parameters to a method.

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6.Inheritance

6-1- Introduction

When we create a class, instead of writing completely new instance variables and methods, we can designate that the new class should inherit the class variables, properties and methods of another class. The previously defined class is called the base class, and the new class is referred to as the derived class. Once created, each derived class can become the base class for future derived classes. A derived class, to which unique class variables, properties and methods normally are added, is often larger than its base class. Therefore, a derived class is more specific than its base class and represents a more specialized group of objects. Typically, the derived class contains the behaviors of its base class and additional behaviors. The direct base class is the base class from which the derived class explicitly inherits. An indirect base class is inherited from two or more levels up the class hierarchy.

6-2- Hierarchal inheritance