**Inheritance** in programming is when one class (the *child* or *derived class*) is able to use the variables and methods of another class (the *parent* or *base class*).  
It’s like a child inheriting traits from their parents in real life — you don’t have to “re-make” what’s already there; you just reuse it.

**Benefit:** It helps avoid repeating code. Common things can go into the base class, and all child classes can share them. This makes programs shorter, easier to maintain, and more organized.

**Example:** If you have an Animal class with a method Eat(), classes like Dog and Cat can inherit it without writing Eat() again.

csharp

CopyEdit

class Animal

{

public void Eat()

{

Console.WriteLine("This animal is eating.");

}

}

class Dog : Animal

{

public void Bark()

{

Console.WriteLine("The dog is barking.");

}

}

Here, Dog automatically gets the Eat() method from Animal through **inheritance**, so you don’t have to rewrite it.