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Polymorphism Explanation

Polymorphism is a bit like getting a prompt for an art assignment – it starts out the same initially, but everyone ends up with something different in the end depending on their own personal needs/abilities. In programming, this looks like having a parent method that can be overridden by a child method. So, for example, the parent function could randomize and display what hair color someone should dye their hair:

```
public virtual string ChooseColor()
{
//….
Return _hairColor;
}
```

However, if you had a class for individuals who didn't have any hair, you could change the child's method to do something like this:

```
public override string ChooseColor()
{
//….
Return _hatColor;
}
```

It's technically the same method, but returns different things depending on needs. This can be very helpful when you are dealing with a series of child classes that have similar-but-not-identical needs. It allows more flexibility that using Inheritance alone. An example from my program is below:

```
public abstract class Goal
{
```

```
 public virtual string GetDetailsString()
   {
        return $"[ ] {ShowName()} - {ShowDescription()} ({ShowPoints()} points)";
   }
}

public class EternalGoal : Goal
{
public override string GetDetailsString()
   {
      return $"[ ] {ShowName()} - {ShowDescription()} ({ShowPoints()} points each occurrence)";
   }
}
```