Explaining polymorphism:

Polymorphism can be defined as the concept that allows object of different classes to take on many forms and to be able to see this, there is need to understand method overriding. This is the ability of a child class to override or adjust the behavior from a parent class. It is the fourth and crowning principle of programming with class. It requires abstraction, encapsulation and inheritance to function properly. The advantage of polymorphism is that it promotes the reusability and maintenance of codes and also makes it easier to extend and modify our programs without changing the currently existing program.

A practical application of this is in the mindfulness activity where by it has different types of objects but they share a common behavior. This is an example of polymorphism:-

*public abstract class MindfulnessActivity*

*{*

*public abstract void RunActivity();*

*}*

*public class BreathingActivity : MindfulnessActivity*

*{*

*public override void RunActivity()*

*{*

*Console.WriteLine("Inhale... Exhale...");*

*}*

*}*

*public class ReflectionActivity : MindfulnessActivity*

*{*

*public override void RunActivity()*

*{*

*Console.WriteLine("Think about a moment of personal growth...");*

*}*

*}*

*// Using polymorphism*

*public void StartActivity(MindfulnessActivity activity)*

*{*

*activity.RunActivity(); }*