**Explain Polymorphism Wk06**

Definition: Polymorphism is the ability of a code of program to take multiple form to suit the need and expectation of different of program.

Benefit and Explanation:

1. Dynamic behavior: In a large program containing multiple use cases, multiple classes can be created for deferent purposes. But to help reduce the size of the program and make it more efficient, polymorphism is applied such that one line of print method can call multiple methods from different classes to perform a needful task personalized to the class and it’s called method.
2. Reduces production time: Polymorphism reduces the overall time needed to write code as one method or one line of code can call tens of method to perform their various duties.

Code sample of polymorphism:

*foreach* (Goal goal *in* \_goals)

  {

   outputFile.WriteLine($"{goal}: {goal.GetName()}, {goal.GetStringRepresentation()}");

  }

With the above code, multiple GetName() and GetStringRepresentation() methods can be called from all the classes in the \_goals list and they all will do their functions personalized to the class where they are member.