What is Polymorphism?

Polymorphism is process of performing a single task in different ways.

In polymorphism, one method have multiple forms based on the type of parameters, order of parameters, and number of parameters. In simple words, Polymorphism is the ability of an object to take many forms.

There are two types of polymorphism –

1. Compile time polymorphism
Compile time polymorphism is also known as Static Polymorphism. Compile time Polymorphism happens at compile time. It means that compiler decides what shape or value has to be taken by the entity.

Example: Method overloading, Operator overloading

2. Run time polymorphism
Runtime polymorphism also known as Dynamic Polymorphism. Run time Polymorphism happens at the run time. It means that it cannot be decided by the compiler. Therefore, what shape or value has to be taken depends upon the execution. Hence the name Runtime polymorphism.

Example: Overriding