Polymorphism

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* Polymorphism is considered one of the important features of object-oriented Programming.
* Polymorphism allows us to perform a single action in different ways.
* In otherwords, polymorphism allows you to define one interface and have multiple implementations.
* The word "Poly" means many and "morphe" means forms, so it means many forms.

Need of Polymorphism:

* Polymorphism allows us to use inheritance, overriding, and overloading to streamline code for easy readability and faster runtimes.

* We can use the specific of compile time and runtime polymorphism to maximize this result.

Types of Java Polymorphism:

* Compile-time Polymorphism: It is also known as static polymorphism. This type of polymorphism is achieved by function overloading or operator overloading.

* Runtime Polymorphism: It is also known as Dynamic Method Dispatch. It is a process in which a function call to the overridden method is resolved at Runtime. This type of polymorphism is achieved by function ~~overloading~~. overriding.

Method Overloading

* When there are multiple functions with same name but different parameters then these functions are said to be overloaded.

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* Functions can be overloaded by changes in the number of arguments or a change in the type of arguments.

Method Overriding

* Method overriding, occurs when a derived class has a definition for one of the member functions of the base class. That base function is said to be overridden.