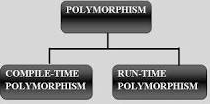
Polymorphism in C++

The word polymorphism means having many forms. In simple words, we can define polymorphism as the ability of a message to be displayed in more than one form.  
Real life example of polymorphism, a person at a same time can have different characteristic. Like a man at a same time is a father, a husband, a employee. So a same person posses have different behavior in different situations. This is called polymorphism.  
Polymorphism is considered as one of the important features of Object Oriented Programming.

  
**In C++ polymorphism is mainly divided into two types:**

* Compile time Polymorphism
* Runtime Polymorphism

1. **Compile time polymorphism**: This type of polymorphism is achieved by function overloading or operator overloading.

**Function Overloading**: When there are multiple functions with same name but different parameters then these functions are said to be **overloaded**. Functions can be overloaded by **change in number of arguments** or/and **change in type of arguments**.

[**Operator Overloading**](https://www.geeksforgeeks.org/operator-overloading-c/): C++ also provide option to overload operators. For example, we can make the operator (‘+’) for string class to concatenate two strings. We know that this is the addition operator whose task is to add to operands. So a single operator ‘+’ when placed between integer operands , adds them and when placed between string operands, concatenates them

[**Runtime polymorphism**](https://www.geeksforgeeks.org/virtual-functions-and-runtime-polymorphism-in-c-set-1-introduction/): This type of polymorphism is achieved by Function Overriding.

* **Function overriding** on the other hand 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**