**1) How many types of modifiers are there in Java.?**

Two types of modifiers are there in java. They are,

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1. Access Modifiers

These are the modifiers which are used to restrict the visibility of a class or a field or a method or a constructor. Java supports 4 access modifiers.

**a) private** : private fields or methods or constructors are visible within the class in which they are defined.

**b) protected** : Protected members of a class are visible within the package but they can be inherited to sub classes outside the package.

**c) public :** public members are visible everywhere.

**d) default or No-access modifiers :** Members of a class which are defined with no access modifiers are visible within the package in which they are defined.

b) Non-access Modifiers

These are the modifiers which are used to achieve other functionalities like,

**a) static :** This modifier is used to specify whether a member is a class member or an instance member.

**b) final :** It is used to restrict the further modification of a class or a method or a field. (for more on final, [click here](https://javaconceptoftheday.com/final-keyword-in-java/)).

The value of a variable which is declared as final can’t be modified once it gets a value. A final method can not be overridden in the sub class and you can not create a sub class to a final class. See [this](https://javaconceptoftheday.com/final-keyword-in-java/) post for more info on final keyword in java.

**c) abstract :** abstract class or abstract method must be enhanced or modified further. (For more on abstract,  [click here](https://javaconceptoftheday.com/abstraction-in-java/)).

This modifier can be used either with a class or with a method. You can not apply this modifier to variable and constructor. A method which is declared as abstract must be modified in the sub class. You can’t instantiate a class which is declared as abstract. See [this](https://javaconceptoftheday.com/abstraction-in-java/) post for more info on abstraction in java.

**d) synchronized :** It is used to achieve thread safeness. Only one thread can execute a method or a block which is declared as synchronized at any given time. (for more on synchronized, [click here](https://javaconceptoftheday.com/synchronization-in-java/).)

This modifier is used to control the access of a particular method or a block by multiple threads. Only one thread can enter into a method or a block which is declared as synchronized.