

# What is the difference between Public, Private and Protected access modifiers?

**Public:** Functions and variables declared under public can be accessed from anywhere means within or outside the class and within or outside the package. It provides highest level of accessibility.

**Private:** Functions and variables declared as private can be accessed only within the same class, and they cannot be accessed outside the class they are declared. Private field or method can't be inherited to sub class. This provides lowest level of accessibility.

**Protected:** When we declare any variable or method with protected modifiers that means that variable or method is accessible from classes in the same package, sub-classes in the same package, subclasses in other packages but not accessible from classes in other packages.

Access Modifiers	Accessible by classes in the same package	Accessible by classes in other packages	Accessible by sub-classes in the same package	Accessible by sub-classes in other packages
Private	No	No	No	No
Public	Yes	Yes	Yes	Yes
Protected	Yes	No	Yes	Yes