Inner classes

Inner Class

So far, we have known the members of the class are variables, methods, constructors. But it is also possible to have a class or an interface as a member of a class.

A class declared inside another class is known as nested classes in java. The scope of a nested class is tied by the scope of its enclosing class (outer class).

- Normal Inner Class in Java
- Method Local Inner Class in Java
- Static Nested Inner Class in Java

Normal Inner Class

A non-static class that is declared inside a class but outside the method is known as Normal inner class in Java.

It is also known as regular inner class. It can be declared with access modifiers like public, default, private, and protected.

Method Local Inner Class

An inner class that is declared inside a method of the outer class is called method local inner class in Java.

Its scope is limited to the block of a method in which it is declared.

Therefore, the declaration of method local inner class cannot use any access modifiers such as public, protected, private, and non-access modifiers such as static.

We can also declare method local inner class in Java inside the constructor, static initializers, and non-static initializers.

The only applicable modifiers for the method local inner class are final, abstract, and strictfp.

Static Nested Inner Class

When an inner class is defined with a static modifier inside the body of another class, it is known as a static nested class in Java.

A static nested class is also considered a top-level class, nested top-level class, or static member class in java. But it is not considered an inner class.

Interview Questions