**Static keyword / Variable:**

[**https://www.scientecheasy.com/2020/06/java-static-variable.html/**](https://www.scientecheasy.com/2020/06/java-static-variable.html/)

**Static Method:**

[**https://www.scientecheasy.com/2020/06/java-static-method.html/**](https://www.scientecheasy.com/2020/06/java-static-method.html/)

**Static block:**

[**https://www.scientecheasy.com/2020/06/static-block-java.html/**](https://www.scientecheasy.com/2020/06/static-block-java.html/)

**Static Keyword in Java**

* In Java, static is a keyword that is used for memory management mainly.
* Static means single copy storage for variables or methods.
* The members that are declared with the static keyword inside a class are called static members in java.
* These members can be accessed even if no instance of the class exists because static members are not tied to a particular instance.
* They are shared across all instances of the class.

**Features of Static Keyword in Java**

1. Static keyword in Java can be applied with variables, methods, inner classes, and blocks.

2. We cannot declare a class with static keyword but the inner class can be declared as static.

3. It belongs to the class than an instance of the class.

4. One basic rule of working with static keyword is that we cannot directly call instance members within the static area because the static members are linked with the class.

5. Static members get memory once when the class is loaded into the memory. But instance members get the memory after the object creation of the class.

Therefore, when we call an instance member within the static area, it means that when a class is loaded into the memory, the static member also loaded into the memory.

After loading, it will look the instance member in its class that is not in existence because we have not created any object till now. Hence, there is ambiguity.

**Use of Static Keyword in Java**

There are mainly two uses of java static keyword that are as follows:

1. The main purpose of using static keyword is that we can access the data, method, or block of the class without any object creation. Let’s understand it with a simple example.

As you know that the main method is static in Java because the object is not required to call the static method. If it is a non-static method then JVM will create an object first and then it will call the main() method which creates the problem of an extra memory location.

2. It is used to make the programs more memory efficient.

**Key point:** A local variable cannot be declared as static. JVM will display modifier error at compile time.