**static Keyword in Java**

The **static keyword** in Java is mainly used for memory management. The static keyword in Java is used to share the same variable or method of a given class. The users can apply static keywords with variables, methods, blocks, and nested classes. The static keyword belongs to the class than an instance of the class. The static keyword is used for a constant variable or a method that is the same for every instance of a class.

**The *static* keyword is a non-access modifier in Java that is applicable for the following:**

1. Blocks
2. Variables
3. Methods
4. Classes

When a member is declared static, it can be accessed before any objects of its class are created, and without reference to any object. For example, in the below java program, we are accessing static method *m1()* without creating any object of the *Test* class.

### **Static blocks**

If you need to do the computation in order to initialize your **static variables**, you can declare a static block that gets executed exactly once, when the class is first loaded.

### Static variables

When a variable is declared as static, then a single copy of the variable is created and shared among all objects at the class level. Static variables are, essentially, global variables. All instances of the class share the same static variable.

**Important points for static variables:**

* We can create static variables at the class level only. See [here](https://www.geeksforgeeks.org/g-fact-47/)
* static block and static variables are executed in the order they are present in a program.

### static methods

When a method is declared with the *static* keyword, it is known as the static method. The most common example of a static method is the *main( )* method. As discussed above, Any static member can be accessed before any objects of its class are created, and without reference to any object. Methods declared as static have several restrictions:

* They can only directly call other static methods.
* They can only directly access static data.
* They cannot refer to [this](https://www.geeksforgeeks.org/this-reference-in-java/) or [super](https://www.geeksforgeeks.org/super-keyword/) in any way.