1.The static keyword is used for memory management in java.

Example: it can be applied for variable,class,method,blocks.

2.Class loading is a process of loading the class files into JVM at runtime.

Execution of a program in java:

-Loading: The classloader locate the class file using a fully loader class name, then reads the class file and then convert it into class object.

-Linking: In this phase the JVM performs various operation in the class such as verifying the class file’s reference, resolving symbolic references,allocating memory to the class variable.

-Initialization: it is a process where the JVM initialize the class variables with default values and runs the class’s initialization block.

3.Local variables in static methods are just local variables in a static method.

4.It is because it execute only once when the class get loaded.It is not required to execute it again when creating different object after the first time.

5.This means you can call a static method without creating an object of the class.

6.It is used to initialize before the main method at the time of class loading.It is because it execute only once when the class get loaded.It is not required to execute it again when creating different object after the first time.

7.STATIC:

* It is also called as class variables.
* It will get memory at the method area.
* Inside a static method can access to static variable only.
* It is created using static variable.

INSTANCE:

* It is also called as instance variables.
* It will get memory at the heap area.
* Inside a non-static method can access to static variable and non-static variable.
* It is created without using static variable.

8.STATIC:

* It is also called as class variables.
* It will get memory at the method area.
* Inside a static method can access to static variable only.
* It is created using static variable.

NON-STATIC:

* It is also called as instance variables.
* It will get memory at the heap area.
* Inside a non-static method can access to static variable and non-static variable.
* It is created without using static variable.