

Q1. Why do we need static keyword in Java, Explain with an example?

A1. The static keyword in Java is used to share the same variable or method of a given class.

```
Eg. Class Main {  
    static int id;  
    static String name;  
    static int marks;  
}
```

Q2. What is class loading and how does the Java program actually executes?

A2. The Java Class Loader is a part of the Java Runtime Environment that dynamically loads Java classes into the Java Virtual Machine. Usually classes are only loaded on demand. The virtual machine will only load the class files required for executing the program.

Q3. Can we mark a local variable as static.

A3. No.

Q4. Why is the static block executed before the main method in Java?

A4. Static block is executed before main method because the compiler stores them in memory at the time of class loading and before the object creation.

Q5. Why is a static method also called a class method?

A5. Static method is also called a class method because a static method belongs to the class rather than object of a class.

Q6. What is the use of static blocks in java?

A6. Static blocks are used in java to declare the block of code which is supposed to be executed before the main function.

Q7. Difference between Static and Instance Variables.

A7. Static Variables :- Static Variables are those variables whose values does not change to object to object.

Instance Variables :- Instance Variables are those variables whose values changes from object to object.

Q8. Difference between Static and non Static members.

A8. Same as A7.