Interview Questions

1. What is a static keyword in Java?

Static is a Non-Access Modifier. Static can be applied to variable, method, nested class, and initialization blocks (static block).

2. Why main() method is declared as static?

If our **main()** method is not declared as static then the JVM has to create an object first and call which causes the problem of having extra memory allocation.

3. Can constructors be static in Java?

In general, a static method means that "The Method belongs to the class and not to any particular object" but a constructor is always invoked with respect to an object, so it makes no sense for a constructor to be **static**.

4. Can we use this to refer static members?

Yes, it's possible to access the static variables of a class using this but it's discouraged and as per best practices this should be used on nonstatic reference.

5. What are all the differences between this and the super keyword?

- This refers to the current class object whereas super refers to the superclass object
- Using this we can access all non-static methods and variables. Using super we can access superclass variables and methods from sub-class.
- Using this(); call we can call other constructors in the same class. Using super we can call superclass constructor from sub-class constructor.

6. What is a final method?

When a method is declared as **final**, then it is called a **final method,** The subclass can call the final method of the parent class but cannot **override** it.

7. Can a main() method be declared final?

Yes, the **main()** method can be declared as final and cannot be **overridden**.

8. What is a Static Final variable in Java?

When have declared a variable as **static final** then the variable becomes a **CONSTANT**. Only one copy of the variable exists which cannot be changed by any instance.