1. What is constructor in Java?

A **constructor in Java** is a block of code similar to a method that's called when an instance of an object is created. Here are the key differences between a **constructor** and a method: A **constructor**doesn't have a return type. The name of the **constructor** must be the same as the name of the class.

1. What is the purpose of default constructor?

|  |
| --- |
| A constructor that have no parameter is known as default constructor. |

**Syntax of default constructor:**

1. <class\_name>(){}

Example of default constructor

|  |
| --- |
| In this example, we are creating the no-arg constructor in the Bike class. It will be invoked at the time of object creation. |

1. **class** Bike1{
2. Bike1(){System.out.println("Bike is created");}
3. **public** **static** **void** main(String args[]){
4. Bike1 b=**new** Bike1();
5. }
6. }
7. Does constructor return any value?

No

4)Is constructor inherited?

No.A subclass inherits all the members (fields, methods, and nested classes) from its superclass. Constructors are not members, so they are not inherited by subclasses, but the constructor of the superclass can be invoked from the subclass.

5) Can you make a constructor final?

6) What is static variable?

7) What is static method?

8) Why main method is static?

9) What is static block?

10)What is difference between static (class) method and instance method?

11) What is this in java?

12)What is Inheritance?

13) Which class is the superclass for every class.

14) Is multiple inheritance is supported in java?why?

15) What is super in java?

16)What is method overloading?

17) Can we overload main() method?

18) What is method overriding:

19) Can we override static method?Why not?

20) Difference between method Overloading and Overriding.

21) What is final variable/final method/final class?

22) Can you declare the main method as final?

23) What is Runtime Polymorphism?

24) What is abstraction?

25) What is the difference between abstraction and encapsulation?

26) What is abstract class?

27) Can there be any abstract method without abstract class?

28) Can you use abstract and final both with a method?

29) Is it possible to instantiate the abstract class?

30) What is interface?

31) Can you declare an interface method static?

32) Can an Interface be final?

33) What is difference between abstract class and interface?

34) Can we define private and protected modifiers for variables in interfaces?

35) What is package?

36) What is Exception Handling?

37) What is difference between Checked Exception and Unchecked Exception?

38) What is difference between throw and throws?

39) What is finally block?

40) What is the meaning of immutable in terms of String?

41) Why string objects are immutable in java?

42) How many ways we can create the string object?

43) What is the difference between String, StringBuffer and StringBuilder ?

44) How can we create immutable class in java ?

45) What is the purpose of toString() method in java ?

46) How can we create immutable class in java ?

47) What is the purpose of toString() method in java ?

48) What is Garbage Collection?

49) What is the purpose of finalize() method?

50) What is difference between final, finally and finalize?

51) Can you access the private method from outside the class?

52) What is singleton class?

53) What do you mean by Access Modifier? Types?

54) Explain Singleton Pattern? Basic conditions required to achieve it?

55) What is an enumeration?

56) What is Downcasting?

57) What is type casting in Java?

58) Give examples of Data encapsulation, Polymorphism and inheritance used in your project?