

Java Interview Questions

1. What is the difference between pass by reference and pass by value?
2. What are the different types of memory areas allocated by JVM?
3. Why people say that Java is 'write once and run anywhere' language?
4. Are arrays primitive data types?
5. What are local variables?
6. What are instance variables?
7. How to define a constant variable in Java?
8. What is the purpose of declaring a variable as final?
9. In Java, if we do not specify any value for local variables, then what will be the default value of the local variables?
10. What are the main principles of Object Oriented Programming?
11. What is a local, member and a class variable?
12. In Java what is the default value of an object reference defined as an instance variable in an Object?
13. Why do we need constructor in Java?
14. What is the value returned by Constructor in Java?
15. Can we inherit a Constructor?
16. Why constructors cannot be final, static, or abstract in Java?
17. What is the purpose of 'this' Keyword in java?
18. Explain the concept of Inheritance?
19. Which class in Java is superclass of every other class?
20. What is the purpose of 'super' keyword in java?
21. Is it possible to use this() and super() both in same constructor?
22. What is the purpose of static method in Java?
23. Why do we mark main method as static in Java?
24. What is the difference between static method and instance method in Java?
25. How will you implement method overloading in Java?
26. How do we implement method overriding in Java?
27. Are we allowed to override a static method in Java?
28. Why Java does not allow overriding a static method?
29. What is the difference between method overloading and method overriding in Java?
30. Does Java allow virtual functions?
31. What is meant by covariant return type in Java?
32. What is Runtime Polymorphism?
33. Explain the difference between static and dynamic binding?
34. What is Abstraction in Object Oriented programming?
35. How is Abstraction different from Encapsulation?
36. What is an abstract class in Java?
37. Is it allowed to mark a method abstract method without marking the class abstract?
38. Is it allowed to mark a method abstract as well as final?

39. Can we instantiate an abstract class in Java?
40. What is an interface in Java?
41. Is it allowed to mark an interface method as static?
42. Why an Interface cannot be marked as final in Java?
43. What is the difference between abstract class and interface in Java?
44. Does Java allow us to use private and protected modifiers for variables in interfaces?
45. How can we cast to an object reference to an interface reference?
46. Can a class be marked final in Java?
47. How can we create a final method in Java?
48. What is the purpose of package in Java?
49. What is java.lang package?
50. What is Garbage Collection in Java?
51. How does Garbage Collection work in Java?
52. What is a Nested class?
53. How many types of Nested classes are in Java?
54. What is the difference between a Nested class and an Inner class in Java?
55. What is the meaning of Immutable in the context of String class in Java?
56. Why a String object is considered immutable in java?
57. Why Java uses String literal concept?
58. What is the basic difference between a String and StringBuffer object?
59. What are the main benefits of Collections Framework in Java?
60. What is the root interface of Collection hierarchy in Java?
61. In Java, how will you decide when to use a List, Set or a Map collection?
62. What are the differences between Comparable and Comparator?
63. What is the reason for overriding equals() method?
64. What is an Iterator in Java?
65. What are the different ways to iterate elements of a list in Java?
66. How will you sort objects by Natural order in a Java List?
67. What is the difference between `x == y` and `x.equals(y)` expressions in Java?
68. What is the use of run time polymorphism in Java?
69. What are the rules of method overloading and method overriding in Java?
70. What is the difference between a class and an object in Java?
71. Can we create an abstract class that extends another abstract class?
72. Why do you use Upcasting or Downcasting in Java ?
73. What is the reason to organize classes and interfaces in a package in Java?
74. What is information hiding in Java?
75. What is the difference between super and this keywords in Java?
76. What are Wrapper classes in Java?
77. What is the access scope of a protected method?
78. Can an Interface implement another Interface?
79. Can an Interface extend another Interface?
80. What is an abstract method?