

Interview Questions

Java Platform

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Wrapper Classes

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Strings

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- 21 . What are differences between StringBuilder and StringBuffer?
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Object oriented programming basics

- 23 . What is a class?
- 24 . What is an object?
- 25 . What is state of an object?
- 26 . What is behavior of an object?
- 27 . What is the super class of every class in Java?

- 28 . Explain about toString method ?
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- 30 . What are the important things to consider when implementing equals method?
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- 32 . Explain inheritance with examples .
- 33 . What is method overloading?
- 34 . What is method overriding?
- 35 . Can super class reference variable can hold an object of sub class?
- 36 . Is multiple inheritance allowed in Java?
- 37 . What is an interface?
- 38 . How do you define an interface?
- 39 . How do you implement an interface?
- 40 . Can you explain a few tricky things about interfaces?
- 41 . Can you extend an interface?
- 42 . Can a class extend multiple interfaces?
- 43 . What is an abstract class?
- 44 . When do you use an abstract class?
- 45 . How do you define an abstract method?
- 46 . Compare abstract class vs interface?
- 47 . What is a constructor?
- 48 . What is a default constructor?
- 49 . Will this code compile?
- 50 . How do you call a super class constructor from a constructor?
- 51 . Will this code compile?
- 52 . What is the use of this()?
- 53 . Can a constructor be called directly from a method?
- 54 . Is a super class constructor called even when there is no explicit call from a sub class constructor?

Advanced object oriented concepts

- 55 . What is polymorphism?
- 56 . What is the use of instanceof operator in Java?
- 57 . What is coupling?
- 58 . What is cohesion?
- 59 . What is encapsulation?
- 60 . What is an inner class?
- 61 . What is a static inner class?
- 62 . Can you create an inner class inside a method?
- 63 . What is an anonymous class?

Modifiers

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- 65 . What is private access modifier?
- 66 . What is default or package access modifier?
- 67 . What is protected access modifier?
- 68 . What is public access modifier?
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- 70 . What access types of variables can be accessed from a class in different package?
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- 75 . What is a final variable?
- 76 . What is a final argument?
- 77 . What happens when a variable is marked as volatile?
- 78 . What is a static variable?

conditions & loops

- 79 . Why should you always use blocks around if statement?
- 80 . Guess the output
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- 82 . Guess the output of this switch block .
- 83 . Guess the output of this switch block?
- 84 . Should default be the last case in a switch statement?
- 85 . Can a switch statement be used around a String
- 86 . Guess the output of this for loop
- 87 . What is an enhanced for loop?
- 88 . What is the output of the for loop below?
- 89 . What is the output of the program below?
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Exception handling

- 91 . Why is exception handling important?
- 92 . What design pattern is used to implement exception handling features in most languages?
- 93 . What is the need for finally block?
- 94 . In what scenarios is code in finally not executed?
- 95 . Will finally be executed in the program below?

- 96 . Is try without a catch is allowed?
- 97 . Is try without catch and finally allowed?
- 98 . Can you explain the hierarchy of exception handling classes?
- 99 . What is the difference between error and exception?
- 100 . What is the difference between checked exceptions and unchecked exceptions?
- 101 . How do you throw an exception from a method?
- 102 . What happens when you throw a checked exception from a method?
- 103 . What are the options you have to eliminate compilation errors when handling checked exceptions?
- 104 . How do you create a custom exception?
- 105 . How do you handle multiple exception types with same exception handling block?
- 106 . Can you explain about try with resources?
- 107 . How does try with resources work?
- 108 . Can you explain a few exception handling best practices?

Miscellaneous topics

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- 110 . How do you loop around an array using enhanced for loop?
- 111 . How do you print the content of an array?
- 112 . How do you compare two arrays?
- 113 . What is an enum?
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- 116 . What are asserts used for?
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- 118 . What is garbage collection?
- 119 . Can you explain garbage collection with an example?
- 120 . When is garbage collection run?
- 121 . What are best practices on garbage collection?
- 122 . What are initialization blocks?
- 123 . What is a static initializer?
- 124 . What is an instance initializer block?
- 125 . What is tokenizing?
- 126 . Can you give an example of tokenizing?
- 127 . What is serialization?
- 128 . How do you serialize an object using serializable interface?
- 129 . How do you de-serialize in Java?
- 130 . What do you do if only parts of the object have to be serialized?
- 131 . How do you serialize a hierarchy of objects?
- 132 . Are the constructors in an object invoked when it is de-serialized?
- 133 . Are the values of static variables stored when an object is serialized?

Collections

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- 135 . What are the important interfaces in the collection hierarchy?
- 136 . What are the important methods that are declared in the collection interface?
- 137 . Can you explain briefly about the List interface?
- 138 . Explain about ArrayList with an example?
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- 144 . What is vector class? How is it different from an ArrayList?
- 145 . What is linkedList? What interfaces does it implement? How is it different from an ArrayList?
- 146 . Can you briefly explain about the Set interface?
- 147 . What are the important interfaces related to the Set interface?
- 148 . What is the difference between Set and sortedSet interfaces?
- 149 . Can you give examples of classes that implement the Set interface?
- 150 . What is a HashSet?
- 151 . What is a linkedHashSet? How is different from a HashSet?
- 152 . What is a TreeSet? How is different from a HashSet?
- 153 . Can you give examples of implementations of navigableSet?
- 154 . Explain briefly about Queue interface?
- 155 . What are the important interfaces related to the Queue interface?
- 156 . Explain about the Deque interface?
- 157 . Explain the BlockingQueue interface?
- 158 . What is a priorityQueue?
- 159 . Can you give example implementations of the BlockingQueue interface?
- 160 . Can you briefly explain about the Map interface?
- 161 . What is difference between Map and sortedMap?
- 162 . What is a HashMap?
- 163 . What are the different methods in a Hash Map?
- 164 . What is a TreeMap? How is different from a HashMap?
- 165 . Can you give an example of implementation of navigableMap interface?
- 166 . What are the static methods present in the collections class?

Advanced collections

- 167 . What is the difference between synchronized and concurrent collections in Java?
- 168 . Explain about the new concurrent collections in Java?
- 169 . Explain about copyonwrite concurrent collections approach?

- 170 . What is compareandswap approach?
- 171 . What is a lock? How is it different from using synchronized approach?
- 172 . What is initial capacity of a Java collection?
- 173 . What is load factor?
- 174 . When does a Java collection throw UnsupportedOperationException?
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- 197 . What is synchronization of threads?
- 198 . Can you give an example of a synchronized block?
- 199 . Can a static method be synchronized?
- 200 . What is the use of join method in threads?
- 201 . Describe a few other important methods in threads?
- 202 . What is a deadlock?

- 203 . What are the important methods in Java for inter-thread communication?
- 204 . What is the use of wait method?
- 205 . What is the use of notify method?
- 206 . What is the use of notifyall method?
- 207 . Can you write a synchronized program with wait and notify methods?

Functional Programming - Lambda expressions and Streams

- 208 . What is functional programming?
- 209 . Can you give an example of functional programming?
- 210 . What is a stream?
- 211 . Explain about streams with an example?
- what are intermediate operations in streams?
- 212 . What are terminal operations in streams?
- 213 . What are method references?
- 214 . What are lambda expressions?
- 215 . Can you give an example of lambda expression?
- 216 . Can you explain the relationship between lambda expression and functional interfaces?
- 217 . What is a predicate?
- 218 . What is the functional interface - function?
- 219 . What is a consumer?
- 220 . Can you give examples of functional interfaces with multiple arguments?

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