CORE JAVA

1. What are the new features in java8?
2. Why java team introduced default methods?
3. Can we use object class methods as default methods in interface?
4. Can we write default methods inside a class?
5. Use of default methods?
6. What is Diamond problem? Solutions to this problem?
7. Can we override static methods?
8. Difference between interface & abstract class?
9. How many ways can we create Optional?
10. Advantages of Optional?
11. Important methods of Optional? Use of flatmap () method?
12. Write an example on Optional?
13. What are lambda expressions? Main objective of lambda expression in java8?
14. Can we modify the local variables which are outside of lambda code?
15. Difference between Anonymous class and Lambda expression?
16. What is functional interface?
17. Is it valid if interface with no abstract method but has @FunctionalInterface annotation on interface?
18. Name some of the predefined functional interfaces?
19. Explain about Predicate Functional interface?
20. How can we join multiple predicates?
21. Write a program to filter even numbers from the list? – use predicate
22. Explain about Function Functional interface?
23. Difference between andThen () and compose () methods?
24. What is UnaryOperator? Can we mix it with Function?
25. What is Consumer functional interface?
26. Consumer<String> consumer1=x-> System.*out*.println(x.toUpperCase());  
     Consumer<String> consumer2=x-> System.*out*.println(x);  
     consumer2.andThen(consumer1).accept("Hi, hello, how are you!");
27. Difference between Functional and Bifunctional interfaces?
28. Write a program that uses BiPredicate, BiFunction and BiConsumer?
29. What is BinaryOperator? Give an example for minBy and maxBy methods?
30. What is method reference? How many types of method references are there?
31. Write an example for Constructor Reference?
32. What is Stream API used for?
33. Difference between java.io. stream and java. util. stream?
34. Difference between Stream and Collections?
35. How many ways we can create Streams?
36. Use streams to convert list of strings into uppercase and print on the console?
37. Print the strings from list which starts with “S”.
38. Limit the 10 numbers from infinity stream?
39. Skip first 10 number and print remaining numbers from 11 to 30
40. Can you name some of the intermediate operations?
41. Name some of the terminal operations?
42. Print the sum of first 20 numbers?
43. Important methods in Collectors class?
44. Write a program to find the max price product name from list of products?
45. Write a program to find the max product from list of products?
46. Write a program to group by the products based on product price?
47. Write a program to partition by product price > 1000 from list of products?
48. Difference between sequential stream and parallel stream?
49. CompletableFuture
50. Java9 features
51. Java10 features
52. Java11 features
53. Jaav12 features
54. Java13 features
55. Java14 features
56. Java15 features
57. Java16 features
58. Java17 features
59. Java18 features
60. Java19 features
61. Java20 features
62. Java21 features
63. ClassNotFoundException vs NoClassDefError
64. JVM Architecture and Memory Management?
65. JPMS (java modules)
66. Concurrent Collections
67. Multi-threading and Concurrency.
68. Thread Local
69. What is time-slicing algorithm
70. Inter-thread communication
71. Wait and sleep
72. Re-entrant locks