Basics of JAVA

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1. What is JAVA ?

2. Features of JAVA ?

3. What are the Different types of applications you can build with JAVA ?

4. What is path and classpath ?

2. Difference between JDK, JRE and JVM ?

3. Explain JAVA memory model?

4. Different data types in JAVA ?

5. Explain the design of JAVA class ?

6. Different types of operators ?

7. Top 5 operators ?

8. Explain how each control statement works ?

(if-else, for, while, do-while, ternary, switch, break and continue)

OOPS

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9. What is Class and Object ?

10. What are different OOPS concepts?

11. What is Abstraction?

12. What is Encapsulation?

13. What is the difference between abstraction and encapsulation?

14. What is Inheritance?

15. What is Polymorphism?

16. What is method overloading and method overriding ?

17. What is static in JAVA ?

18. What is final ?

19. What is final, finally, finalize ?

20. What is static and dynamic binding ?

21. Abstract class vs interface ?

22. Which one you choose between abstract and interface ? ( DISCUSS)

23. Why do create abstract classes in application development ?

24. why do create interfaces in application development ?

25. What are different types of access modifiers ?

26. What is call by value ? ( DISCUSS)

27. What is HAS-A relation ?

String

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28. What is String in JAVA?

29. What is String pool ?

30. Why String is immutable ?

31. How do you make a class immutable ?

32. StingBuilder vs StringBuffer ?

33. == vs equals ?

34 Top 5 methods in String class ?

Exception Handling

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35. What is Exception Handling and How do you achieve it ?

36. How do you make sure a code must be executed even if exception happens ?

37. What code you normally write in finally block?

38. What are checked vs unchecked exceptions?

39. How do you create custom Exception?

40. How does exception propagation works?

41. throw vs thorws?

42. Exception vs Error?

43. What are inner classes?

44. What is Anonymous class?

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Collections

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45. JAVA Collection framework tree ?

46. ArrayList vs LinkedList?

47. ArrayList vs Set?

48. Which one you prefer between ArrayList vs LinkedList ?

49. How do you sort collection of elements in JAVA ?

50. What is Collections class in JAVA ?

51. HashTable vs HashMap?

52. What is HashMap?

53. How does HashMap Works?

54. What is HashMap collison?

55. What is ConcurrentHashMap?

56. Why do you think Strings makes approriage keys for HashMap ?

57. What kind of classes are good for HashMap keys ?

58. What is Iterator vs ListIterator?

59. Comparable vs Comparator interfaces?

60. Treeset and TreeMap?

61. what is contract between hashcode and equals?

62. Why do you need overridge Hashcode and equals?

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Multi-Threading

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63. What is multi threading ?

64. How do you create Threads ?

65. How do you synchronize your code ?

66. What is volatile ?

67. What is race condition ?

68. What is dead lock ?

69. What is ThreadLocal ?

70. What is ThreadPool ?

71. How do you use Executor framework ?

72. What is starvation ?

73. Synchronized methods vs Synchronized blocks ?

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Miscellaneous

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74. What is serialization and externalization ?

75. How do you avoid a variable particiapting in serialization ?

76. What is marker interface ?

77. What is Enum in JAVA ?