Web services

1) what is difference b/w Rest and SOAP web services?

2) Why Rest is better than SOAP?

3) what is Rest Architecture?

4) What we can't do with SOAP which could be achieved by Rest?

5) How to secure our Rest Service? What are the ways to achieve security?

6) How to create rest web service structure in an Application? which all layers required?

Springs

7) What is DI and IOC?

8) How to inject and object ? what kind of injection are possible in Spring an how to achieve them?

9) What is the scope of bean ?

10) How to achieve validation in spring?

Core Java

11) What is an interface and what are the changes in java 8 ?

12) What is difference b/w interface and abstract class?

13) What are streams?

14) How to achieve abstraction?

15) Difference b/w comparator and comparable? How to sort customize object key in Hashmap to provide unique key implementation?

16) How Hashmap works in java 8?

Multithreading

17) What is concurrency, how to achieve thread safety?

18) There are five thread waiting in a synchronized block does six thread can get access in the same block?

19) How inter thread communication take place? What is wait () and notify () method?

20) How thread pool works and what is the Implementation of Executor framework?

21) Why have you used REST and which REST did you choose. Is there any specific reason to choose the same?

22) What is Future? How does future return the value?

23) Is Future’s get () method blocking or non-blocking? Tell entire code for implementing Calling till get the returning object.

24) What is Count down Latch? Tell a program and syntax by using Count down Latch.

25) What is the difference between My Batis and Hibernate? Is My Batis a complete ORM tool?

26) What Caching strategies is in hibernate.

27) Difference between first level and second level cache.

28) If two sessions are open then how the second session will get the updated record by first session.

29) Difference between Call by value and call by reference.

1. Output of the program :

**public** **class** TestReference {

**public** **static** **void** main(String[] args) {

              MyClass m = **new** MyClass();

              Map map = **new** HashMap();

              map.put("A", "A");

              map.put("b", "b");

              map.put("c", "c");

              System.***out***.println(map);

              m.method(map);

              System.***out***.println(map);

*method*(map);

              System.***out***.println(map);

       }

**public** **static** **void** method(Map m) {

              m.put("d", "d");

              m = **null**;

       }

}

**public** **class** MyClass {

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       }

}

30) Rules of overloading and overriding.

31) What type of exception can overridden method can throw?

32) When to make custom exceptions checked or unchecked and why.

33) Methods of Collections utility class.

34) Design patterns one has used in project.

35) Compare and swap

36) Semaphore

37) Implementation of blocking queue.

38) DI

39) Generics and usage

40) Type eraser.

41) New methods added in concurrent hash map -putifabsent and why it is added

42) Hibernate cache

43) Caching strategy

44) Spring transaction isolation level

45) Rest web services.

46) Rest maturity model

47) Future.get is blocking or not. If yes how we can make it unblocking

48) If any exp on nosql and asynch programming.

49) Code problem based on pass by value concepts

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60) Left Shift Right Shift Operators.

61) Solid Principles

62) Hashmap internals

63) ConcurrentHashMap working and new methods.

64) JDBC basic questions

65) Searching and sorting basics what methods are there in Collections to get that.

66) get Method of Future . Future.get

67) Diff between Latch and Cyclic barrier.

68) What is Interface

69) What is Factory design pattern and how Interface helps there.

70) Junit testing and how you create test cases and what strategy you follow.

71) How to submit queue of tasks and wait for some time and if result is not out then move forward and exit the program.

73) How to find top 10 in SQL

74) How to find top 10 within groups

75) How to create multi to multi relationship in database

76) How to create custom exception , Checked Exception vs Runtime Exception , which one will you use.

77) Explain multithread project if you have worked on it, how did you decide Thread pool size in your project.

78) Use of servlet filter , how it’s different from servlet

79) SendRedirect vs forward in JSP.

80) Query to remove duplicate record from table.

81) Which concurrent collection you have used.

82) What is lambda expression what is the benefit of this.

83) Putty command to take thread dump , how will you analyze Out of memory  error , how will you resolve it.

84) How to make class immutable , what’s the benefit of immutable class. Can Hashmap key mutable , what will be the problem.

85) Collection.emptyList vs new ArrayList which one is preferable if method need to return zero length collection.

86) Which design patterns you have used , explain factory design pattern.

87) What is spring micro services pros and cons , why should you use micro service.

88) Best policy regarding exception handling

89) What is spring boot , why should you use it.

90) Finally vs Finalize , when should you use these methods.

91) Which data structure you will use to make stack . Array vs Arraylist vs LinkedList

92) What is Rest Maturity Model, how did you implement rest web services in your project.

93) Completable future in java 8 . Explain.

94) What is noSQL?

95) What is difference between indexed cluster and non indexed cluster?

96) How collection.unmodifiableMap () works?

97) What is self join and why do we need it?

98) If worked on JMS which framework have you used?

99) If you are implementing comparable interface and comparing Employee object. You want to sort on name and id both then you will compare name and id both. Suppose in future some more fields are added in Employee class and you want sorting on basis of all fields then if else will be added more to compare method, Can we manage these if else some other way?

100) Suppose you have a table having column key and value. This table is available in Dev and Test environment. Now you want the data that is not matching in both tables write sql query for this.

101) Why we use ThreadLocal?

102) How to print some message when our Executors has finished all task?

103) Which JAVA API has been modified in java 8?

104) How can we interrupt a thread? what interrupt method do we use?

105) What changes has been made in collection in java 8?

106) What is Checked Exception and Unchecked Exception

107) What is ReentrantLock lock?

108) What are the types of Reentrant Lock?

109) What are the different ways of acquiring a lock?

110) Explain deadlock situation? How to avoid deadlock?

111) Difference between ++i and i++?

112) How do you remove duplicate row from a table?