**SIMENS** **INTERVIEW QUESTIONS**

**FIRST ROUND:**

Written Test (with pen and paper) 5 questions 30 min duration

1. Given a List of N number a1, a2, a3........an, you have to find smallest number from the List that is repeated in the List exactly K number of times.

Input Format

First Line of Input Contain Single Value N, Size of List

Second Line of Input Contain N Space Separated Integers

Third Line of Input Contain Single Value K

Output Format

Smallest Integer Value That is Repeated Exactly K Number of Time

Constraints

0 < N < 100001

0 <= K < 100001

0 <= ai < 100001

NOTE

There Will Be At least One Variable Which Is Repeated K Times

2. Class A has to keep generating random numbers and it has to notify class B when it generates a composite number. Class B has to print the number whenever it receives a notification. (Provide code for same)

3. The program has to search for a word in a data structure of multimillion entries what libraries/mechanism within java you recommend to minimize the time of search

4. Given a List of Distinct N number a1, a2, a3........an.

Find The Position Of Number K In The Given List.

Input Format

First Line Take Input Value of N

Second Line Take Input N Space Separated Integer Value

Third Line Take Input Value of K

Output Format

Position of K in the Given List

Constraints

0 < N < 100001

0 < ai < 1010

0 < K < 1010

NOTE:

Array Indexing Starts From 0

SAMPLE INPUT

5

1 2 3 4 5

4

SAMPLE OUTPUT

3

Time Limit: 1.0 sec(s) for each input file.

5. Complete the merge String function .It has 2 parameters:

1. A String a.

2. A String b.

Your function must merge string a and b and then return a single merged string. A merge operation between 2 string describe below

* Append alternating character from a and b , respectively, to some new String, merged string
* Once all of the characters in one of the strings have been merged, append the remaining characters in the other string to merged string
* Use only one single iteration to merge string

Sample input: s1=ab s2=zsd output: azbsd

**SECOND ROUND (40 min +)**

1. Project Description with end to end only the part which u worked
2. What are the main oop principles and where u used in your project and why
3. Which java version u familiar just give a brief on it about the new features
4. What are the new features introduced as part of Java 9
5. Will java stream API will give better performance as compare with java 7 approach can you proof it? (She gave laptop configure with jdk 9)
6. What are the method presents in Object class, why 3 wait () overloaded method what is the purpose of it.
7. Did you aware on Concurrent API? what are the new DS introduced in concurrent API just give a brief and purpose
8. Did you aware on Executor Framework if yes what is the difference between execute() and submit() method
9. What is Type generic in Java? Did you used as part of your project if yes. Where and its purpose
10. How you exposing your rest services? write snippet of code (she gave a scenario) I have a requirement based on product name it will give me price just one input and one op
11. What is difference between @pathVariable and @RequestParm when we should choose which one (she asked it based on my previous question code)
12. Did you worked in Spring Security if yes which approach u used xml or configure if configure then why 3 overloaded method provided in SpringSecurityConfigureAdapter what is the purpose of each one (As I said Configure approach that’s why this question asked)
13. I want to stop some process before off my server how can I achieve this
14. What is the difference between Soap web services and rest web services , in which case we should go for which one
15. Did you aware on WSDL? if yes what are the components of WSDL and its purpose
16. Which part you worked Provider or consumer? Can you write WSDL?
17. They gave small scenario to explain WSDL structure for overloaded method public Device getDeviceInfo(int deviceId);

Public Device getDeviceInfo (String deviceName);

**THIRD ROUND (Asked max Question from Resume)**

1. Sort intro about you not project and technology all
2. What is Data Modeling? He Gave one Scenario and tell me to approach data modeling for same
3. What is NoSQL? Why people are using it .is there any performance improvement?
4. What is Aerospike did u used it?
5. What are the all spring modules you work just give me comparison whether that think can’t you achieve in simple J2EE?
6. Give a Real world example of Spring Transaction which we all are using our daily life
7. How can I configure Data source in such a manner that I it will not tightly coupled with my DB. assume today am using Oracle in future I want to move MySQL so that time it should not impact to my business.
8. Where you used Set and List in your project just tell me the exact scenario , after my explanation He asked suppose am fetching bunch of Employee records from Table and I want to store them in Set is this right approach or not just give point to point answer
9. What is Jhipster what is the purpose it, did you ever used it?
10. How you are deploying your micro services
11. Why JSON why not XML? where we can integrate both XML and JSON from UI
12. What are the Repositories in spring boot and how we will write if I have sample Entity Price give a sample.
13. If in spring boot application.properties is there then why we need application.yml
14. Why spring boot why not spring .give point to point answer
15. Assume I have an interface ECurrency with getCurrencyInfo (Locale locale) and I have multiple concert implementation I have like INCurrencyFactory, USCurrencyFactory like this I injected both in my services .but I want to inject both as a single instance how can I approach to this use case.

Some few questions is there I can’t remember I will update latter