Java Questions

1. Write to prog to login in an application using jdbc . Also expalin th edifference between the prepared statement and callable statement
2. Date difference without using theinbuilt date class
3. Nqueens algorithm
4. Snake and ladder
5. Tic tac toe
6. Soduko
7. Explain polymorphism in java
8. Implementation of an Atm
9. Find the maximum occcurance of the number from the given array list and state the complexity of the made algorithm
10. Internal implementation of the Hash Map
11. Difference between .equals and ==
12. Concept of string pool
13. Printing of a matrix in a spiral manner
14. Write a programe for file handling
15. Recursive algo to reverse the given string
16. Write your own array List implementation having the get and put method
17. Widening and Boxing concepts
18. Serialization and related exceptions
19. Given a csv file having the first field as date and rest will be user ids of an online shopping site.Find 5 user ids who have done maximum transaction in the month of feb.
    For example : Input file is like : 01/02/2014,123,547,47,23,99…
    02/02/2014,45,87,123,789,45…
    where the first field Is date and rest of them are the user ids and the csv file has this data for the month o ffeb.Find the top 5 users who have done most transactions

20. Puzzle : You can use four 7 only and the operators + - / * . to make a digit 100 out of these arrangement . Ans : 77/.77
21. Design a implementation of railways in which input are two text boxes: start date and end date and on button click it gives 3 outputs : 1- trains originating from that station. 2- trains stopping at that station. 3 –trains passing from that station without halting on that station. Also make the DB design for the same keeping in mind all the checks,constraints and the keys (time alloted would be 20 mins).
22. Common- describe the toughest or recent implementation that you have done in your current project

Pl/Sql related questions

1. Name any 5 inbuilt sql exceptions
2. Pseudo columns in sql
3. How to remove duplicate rows in a table having no primary key
4. Questions based queries involving use of inner queries, joins.self join,rank
5. Few ways of optimising sql queries

Logical Ques :

1) Write a program to generate fibonacci series.
2) Write a program as follows:
   It takes two dates as input. For e.g 3 Jan 2013 and 5 Feb 2015 .
   Output should show number of times a day occurs between these two dates.
   For e.g between above mentioned dates Monday occurs 105 times , Tuesday occurs 104 times … etc.
   Also consider leap years in calculation.
3) Write a program to generate below mentioned sequences(along with spaces)–

Program:1

```
    1
  2   2
3   3   3
4   4   4   4
```

program 2:

```
      1
    2   3
  4   5   6
7   8   9   10
```

program:3

```
      *
    *   *
  *   *   *
*   *   *   *
```

SQL Server Queries:

1) Write a query to delete duplicate rows from a table with using row_num() .
2) There are two tables. One has employee name ,department and emp_id. Other has emp_id,salary , month of salary credit. Write a query that fetches Emp_name and salary having maximum salary in each department. (without using aggregrate functions)
3) Why should we not use cursor in set based approach. What else can be used.

4) What is the significance of NOCOUNT in SP.
5) Describe the toughest implementation(SQL server) you have done in your project and when. If given the same situation now what would be your choice. How would you optimize the query now?

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1) Write recursive fibonacci function.

2) Write any sorting algorithm (did Bubble sort)

(i.e Bubble Sort, Insertion Sort, Selection Sort, Merge Sort)

3) Array A contains int 0 to 9 in random order and array B contains int 0 to 9 also in random order. So assume that means A=B.

So you been give two array containig non repeting random int of any size, your method should return true if both array equals as per above assumption.

4) Implement your arraylist implementation.

5) On given array find first non-repeating element.

6) Implement stack.

7) Find second largest element from linkedlist data structure

(Assume you have referance to first node element)

8) Implement following:

* means 0 to n character

. means single character

So AAAABABBBAAC = A*B.B*C

Implement method which accept any String and any pattern as per above and return true if string matches pattern.

9) Write application to store chess game steps.

10) Evalute mathametical expression. (Read about prefix notation)

11) array contains n character with repeatation, find second most repeated character with count.

Follow up : print all charcater with repeatation count

Some queries with employee, department table. (forgot exact questions)

Puzzle :

Suppose item i1,i2, i3 costs 25 paisa, 1 rs, 25 rs. You have to buy 100 items using only 100rs.

Design flight search screen. Search screen contains departure city, arrival city, start date, end date and submit button. Result table contains flight list matching following criteria:

- exact match search criteria

- Some flights are direct flight, some are going via other city. Your search list should display these result also

Also design DB for the same.