Controllers Interview

Round 1:

1.)Description of project in detail.

2.) How will you parse and validate the following string

[A(a{bcde}hfgh)klmn]

3.) How will perform addition of two numbers. The 2 numbers are really long and cannot be stored in int datatype so you to store it in string datatype.

Eg. String s1=”1234509876679”

Strings2=”23451111788899”

1. You have a data dictionary with words like

apple,axe,ape,bat,act

When you type ‘a’ all the words starting with ‘a’ should displayed

Apple,axe,ape,act

When you type ‘ap’ all the words starting with ‘ap’ should be displayed

Apple,ape

When you type ‘app’ all the words starting with ‘app’ should be displayed

Apple

5.) What is Hashing?

6.)Use of Hashcode and equals?

What is the length of hashset if hashcode returns value 0 for all objects?

What is the length of hashset if equals returns true for all objects?

What is the length of hashset if hashcode returns value 0 and equals returns true for all objects?

Round 2:

1. Write a query to display duplicate records.
2. Write a program to dispay letters and their occurrence.

Eg. {aababccc}

a🡪3

b🡪2

c🡪3

1. Levels of Log4j debugging.

**GS Inteview For QIS on (27-02-2015)**

1. Introduction round [ 1st Round]
2. What would you do if client complains that the webapp gets hung for 5-10mins? What are the necessary steps which you would take up? How will you convince the client? Where will you start looking?
3. How much do you rate yourself in SQL?
4. Do u know database concept very well apart from just writing SQL queries? What is Normalization? How many normalization forms are there? Explanation of 1st, 2nd and 3rd NF.
5. Is it always advisable to have database in Normalization form?
6. What is an Index? How does it work internally? In what scenario it is created
7. Is it always advisable to have indexing on primary key? Drawbacks of having index.
8. She drew 2 tables , having no foreign key relationship in between the tables. She asked me to join these tables and write a Query to display dept name and count of employees in each dept.

1. She asked me what will be the output if there is no joins while fetching data from two tables. Basically she was asking me the output for the Cartesian product of two tables.
2. What is an interface? Abstraction, abstract.
3. Write a program to check if two strings are having the same characters. Return true if so. Code explanation. Then follow up questions like What if there are repetitions of alphabets and also both are not having the same length. Which letter will get first deleted? How will you make the other one to be picked up for deletion?
4. How will you find missing number from an array in sorted order? Then follow up questions – how will you make your program work to find more than 1 missing numbers if array is not in sorted order.
5. If a number is given, how will you search in an array. I explained with linear search.

Then she asked me what if the array size is huge? Then I explained with binary search.

1. Introduction Round. [ 2nd Round]
2. Project explanation.
3. Scenario - He has a class and instantiated another class inside his class by passing path. In this path, the file should be created. Then he invokes a method on this object. The output should be an excel file having two columns -> Financial Advisor ID and count of users associated with this ID.

Then he asked me how will I design this class? I explained him that I need to have database connection, executing the query, using IO stream, fetching the result set and the finally writing into the excel file. He told me to write each and every step involved in this.

When I was about to start writing I told him that I need POI jar, then have to create workbook and then worksheet.

Then he told me not to use excel but simple text file. Then he said delimiter for this text file is comma, tomorrow this delimiter could be changed.

He made me wrote almost each and every step.

He spent more time on this with other follow up questions.

1. There is an array. Now how will you break this into 3 parts such that the elements in the first part should be sorted in ascending order, second part in descending order and then last part in ascending. If you draw a graph with these data , he showed me how the graph should look like.

I should not use another temp array for doing this, should be in place array(same array)

If I give one answer, he would twist the question and then ask for another solution, then sometimes he would say that solution will not work . I also used to argue with him like why not this will work, this will definitely work - justification.

He spent more time on this again.

He was basically trying to see my approach.

It was very interesting. I enjoyed.

1. Outer joins , left outer join, Right outer joins explanation.
2. Introduction [ 3rd Round]
3. He picked a project and asked for explanation. Project architecture.

Follow up questions related to project.

Have you ever thought of doing automation? In what scenario you would want to automate your report infrastructure.

1. Have u used ANT? What is build.xml? What does build.xml contain?
2. Have u used JUNIT. Explanation.
3. Do u know maven.
4. How comfortable u r in Unix.
5. Do u know stored procedure other than simple queries.
6. Have u done performance tuning? Follow up questions.
7. He picked another project from my resume and asked for project explanation.

Project Architecture, framework related questions. Other Follow up questions.

1. Do u know collection. I have an array with words. Words are repeating. How will I find the count of each word? I want to sort this based on count and display only the words.

How many approaches do u have to solve this. Optimization.

1. I have an array. How will I find an index such that sum of the elements before this index and sum of the elements after this index should be same. Display this index.

Follow up questions with slight changes.

1. Introduction [ 4th Round]
2. Do u know basic unix commands. He asked me to find all file names having a particular pattern.
3. He asked me if we should do Regression testing or not.
4. Do u know SQL. Question related with Cartesian product of two tables.
5. Do u know Junit? Do u know Maven?
6. He drew 1 box having another 3 boxes inside it. Each box is again having other boxes inside it. He has a base class instant which can only give the count of immediate child boxes.

Write the code in order to get the count of all immediate children and sub children.

I wrote the program. Then, he said what if I have 100 children and sub children. Do u still write in that way. I said “no”. Then I told him that I will write recursion function. For this also he told me to write the code. He was just trying to see my approach.

1. What is your strongest and weakest point?
2. How much do u rate yourself in java? [3rd March 2015 Last round – didn’t ask for the introduction]
3. Which technologies have you worked on?
4. Project Explanation. Follow up questions. He spent more time over here, asking many WHY????
5. How much do u rate yourself in SQL?
6. Have u faced any performance issues? Have u done Performance tuning?
7. New features in jdk new version
8. I gave same rating for both Java and SQL. For this also he was asking WHY same rating.
9. Difference between ArrayList and LinkedList.

*Thank you everyone for all your supports.*

**From:** Vinothkumar Palani   
**Sent:** Thursday, March 05, 2015 3:14 PM  
**To:** Sai Y Raghupatruni; Venkatesh Kasaram; Anubhaw K Nand; Kartik N Sapa; Haribabu Sapa; Raghava R Kutcharlapati; Naresh Doniparti; Jai P Chinchankar; Ravish Chugh; Aribam G Devi; Shailaja S Dharmapura; Priyanka SG; Monalisa Mohapatra; Mohammad S Salam; Ravitheja Mandula; Rajashekhar Ganamoni; Swati Khetrapal  
**Cc:** Shrijith Shirnali; Arumugam Kanipakam; Umashankara Sharma; Purushottam Kumar(NABFS00)  
**Subject:** GS PWM Interview questions

Hi team,

The questions asked to me are listed below:

                java

what are the technlogies you have worked ?

hierarchy of colelctions ? list ,set and map interfaces.

java 1.5 features ?

what is generics ?

how to store two different objects in same arraylist ?

what is arraylist and linked list ? differences, internal implemenation and its growing size ?

what is design pattern ? explain fascade and singleton ?

how to avoid cloning in singleton ?

why string is immutable ?

how to create immutable class ?

what is transient variable  ?

have you worked on performance analysis ?

how to implement restfull webservices for employment and department objects ?

how you will convert objects to json and json to objects from request?

difference between soap and restfull webservices ?

advantage of restfull webservices ?

                Web

difference between javascript and jquery ?

why jquery is required ?

what is ajax ? and its uses and syntax and real time example ?

how you will proceed operations for two select fields , country and state fields ?

what is objects in javascript ?

Thanks

Vinothkumar P

**From:** Sai Y Raghupatruni   
**Sent:** Monday, March 02, 2015 2:13 PM  
**To:** Venkatesh Kasaram; Anubhaw K Nand; Kartik N Sapa; Haribabu Sapa; Vinothkumar Palani; Raghava R Kutcharlapati; Moubani Mazumder; KARTHICK SANTHARAM; Naresh Doniparti; Jai P Chinchankar; Ravish Chugh; Aribam G Devi; Shailaja S Dharmapura; Priyanka SG; Monalisa Mohapatra; Mohammad S Salam; Ravitheja Mandula; Rajashekhar Ganamoni; Swati Khetrapal  
**Cc:** Shrijith Shirnali; Arumugam Kanipakam; Umashankara Sharma  
**Subject:** RE: Tirumala prasadam

Hi Team,

Below are the questions posed to me followed by self-introduction during QIS interview.

Name of the interviewer : Sunil(GS employee)

Build management

1. Difference between build.xml and pom.xml.
2. Procedure to prepare archive file (either war/tar/jar file) of your web application.
3. Structure of the build.xml(different tags present in build.xml).
4. How to control new jar file version either by using build.xml/pom.xml.

Release

1. Explain how the SDLC of your project.
2. Will there be any changes to build.xml file if there any changes happen during testing phase.

Java questions

1. Different types of primitive data types present in java.
2. Difference between final and immutable.

Unix commands

    1.How to put archived file(war/jar/tar)  from local system to remote system.

    2.What is the first line in any shell scripting file.

I will keep you posting any more questions once recollect.

Thanks & Regards,

Yoganand.

1)Tell me about yourself

2)Tell me about your current project, technology stack u have worked upon and your roles and responsibility in the project

3)Difference between Abstract Class and Interface and when to use what?

4)Difference between HashMap and HashTable?

5)Why Hash Table does not allow Null key or Null value?

6)Suppose i have and Array List of Size 10 and all the positions are filled and I insert an element at 5th position what will happen?

7)What happens to the old array when the new array is created and all the elemants are copies into it?Is it immediately garbage collected?

8)Difference between Array List and Linked List and when to use what?

9)Suppose we have a requirement of a large number of additions what will u prefer array list or linked list?

10)Suppose in run time polymorphism the function in the super class throws IOException, is it necessary that the overriding function should also throw the IOException?

Is the throws clause the part of the method signature?

11)In which design patterns have u worked upon?

12)Can u explain factory design pattern?

13)Explain Singleton design pattern?

14)How can we prevent clone method to make a clone of the object in case of Singleton?

15)Have u used and performance testing tools, If yes explain how to use it?

16)Do tou have an idea of frontent technologies like jquery, ajax etc? Will you be able to work upon them for some time?

17)In which web services have you worked upon? Can u explain the difference between SOAP and RESTFUL web services? Which one is better?

**From:** Bhagvan Das   
**Sent:** Monday, February 02, 2015 2:04 PM  
**To:** Priti Yadav; Kartik N Sapa; Deepak K Ram; Dhiraj Kumar Choudhary; Aribam G Devi; Jai P Chinchankar; Narendra Babu Nasanakota; Rajashekhar Ganamoni; Ravish Chugh  
**Subject:** GS interview Questions

**FYIP…**

**1st Round**

1. Tell me about yourself

2. What is the singleton pattern in java. Where have you used .

3. What are the design pattern did you use in your application

4. What is deadlock? describe with an example.

5. What is the synchronization?

6. What are the collections used in your project

7. What is the data source object.

8. Have to worked on multithreading

9. Write a query to find the maximum salary.

10. What is exception? Describe the run time exception in brief.

11. How to reverse the linked list.

12. One analytical question.1-1000 random no. are given. you need to tell the no in minimum step what is that no.

13. Describe your project architecture. What is the spring MVC model describes?

14. What is the web server you have used in your project?

**2nd round**

1. Describe about yourself.

2. Scenario about your project which you are not able to resolve.

3. Did you work on the Sybase database?

4. Tell me about your project in brief.

5. What are the various keys in hibernate.

6. Different type of joins.

7. How to use in database.

8. Did you work in support project?

Thanks & Regards,

Bhagvan Das

Senior Software Engineer

Mob : +91-9686470350 |Email :  [bhagvan.das@igate.com](mailto:bhagvan.das@igate.com)

FYI.

**From:** Prakhar Tripathi   
**Sent:** Friday, January 30, 2015 7:00 PM  
**To:** Bhagvan Das; Unnikrishnan Mundath; Aribam G Devi; Sashi B Choubey; Mohammad T Farooque; Jai P Chinchankar; Dhiraj Kumar Choudhary; KARTHICK SANTHARAM; Ravish Chugh; Rohit P Bansal; Shailaja S Dharmapura  
**Cc:** Purushottam Kumar(NABFS00)  
**Subject:** GS Interview questions

Hi All,

PFA the question asked by GS ppl.

1)Tell me about yourself

2)Most recent project, and explanation of your roles and your module

3)HashMap- If we are using object as key, and don't override equals method then what will happen..?

4)Checked and Unchecked Exceptions

5)Can we handle unchecked exceptions

6)Various keys in sql

7)Is primary key a composite key

8)Different joins and their explanation

9)Difference between abstract class and interface and whan to use what?

10)Difference between SOAP and REST web services

11)Contents of a WSDL file

12)Have you worked as and individual on any module without the help of anyone?

13)Except SOAP and RESTFUL have u used anything to communicate between different modules?

14)Are you aware of the locks in the database?

**Prakhar Tripathi**Senior Software Engineer   
iGATE Global Solutions Limited

iGATE Knowledge Park, IT1/IT2, TTC Industrial Area,  
AIROLI, Navi Mumbai – 400708  
Mobile: 9022891571

FYI…

**From:** Deepak K Ram   
**Sent:** Thursday, January 29, 2015 3:41 PM  
**To:** Unnikrishnan Mundath; Mohammad T Farooque; Shailaja S Dharmapura; Deepak K Ram; KARTHICK SANTHARAM; Sashi B Choubey; Jai P Chinchankar; Kartik N Sapa; Rohit P Bansal; Dhiraj Kumar Choudhary; Aribam G Devi; Swati Khetrapal; Ravish Chugh; Gopikrishna Yaramothu; Venkatesh Kasaram; Bhagvan Das  
**Subject:** FW: Telephonic round from US Client

FYI !

**From:** Deepak K Ram  
**Sent:** Thursday, January 29, 2015 3:37 PM  
**To:** Shrijith Shirnali  
**Cc:** Purushottam Kumar(NABFS00)  
**Subject:** Telephonic round from US Client

Hi Shrijith,

Please find below question of telephonic round from US Client.

1.Tell me about ur recent project and architecture.  
2.Difference between Interface and abstract, which scenario ,which one use.  
3.Diffrence between composition and Aggregation,which scenario which one is  better.  
4.difference between rest and soap webservice  
5.what is TreeMap, what will happen when using custom object as key.   
6.Jquery grid concept , what is use of dollor sign and replacment.   
7.int a[]={1,2,4,6};  
 int b[]={3,7};  
   
Explain algorithm  for merging and decending order .  
8.design pattern used in project.

Thanks & Regards

Deepak K R

FYI…

**From:** Sashi B Choubey   
**Sent:** Tuesday, January 27, 2015 1:35 PM  
**To:** Aribam G Devi  
**Subject:** FW: GS\_Interview

**From:** Sashi B Choubey   
**Sent:** Thursday, January 22, 2015 5:48 PM  
**To:** Raghava R Kutcharlapati  
**Subject:** FW: GS\_Interview

Thanks & Regards,

Sashi Choubey

**From:** Sashi B Choubey  
**Sent:** Friday, January 16, 2015 7:34 PM  
**To:** Shrijith Shirnali; Purushottam Kumar(NABFS00); Umashankara Sharma  
**Subject:** GS\_Interview

Hi All,

PFB the questions asked in GS Interview

1. Current Project & its details, individual contribution & role
2. Abstarct vs Interface & when to use which
3. Composition vs inheritance
4. Different Design Patterns used with examples
5. Which is the best data type in java for storing currency
6. What is Generics & its advantages
7. Junit implementations
8. WebService basics
9. Difference between SOAP & Rest

Thanks & Regards,

Sashi Choubey

FYI…

**From:** Sashi B Choubey   
**Sent:** Tuesday, January 27, 2015 1:33 PM  
**To:** Aribam G Devi  
**Subject:** FW: GoldMann Sachs Interview questions  
**Importance:** High

**From:** Sashi B Choubey   
**Sent:** Thursday, January 22, 2015 5:48 PM  
**To:** Raghava R Kutcharlapati  
**Subject:** FW: GoldMann Sachs Interview questions  
**Importance:** High

Thanks & Regards,

Sashi Choubey

**From:** KARTHICK SANTHARAM  
**Sent:** Wednesday, January 14, 2015 3:40 PM  
**To:** Sashi B Choubey  
**Subject:** FW: GoldMann Sachs Interview questions

**From:** KARTHICK SANTHARAM   
**Sent:** Wednesday, January 14, 2015 3:27 PM  
**To:** Purushottam Kumar(NABFS00)  
**Cc:** Shrijith Shirnali; Umashankara Sharma  
**Subject:** GoldMann Sachs Interview questions  
**Importance:** High

Hi Purushottam,

Below are the GS interview questions

1.       Difference between Arrays and ArrayList

2.       Why String argument array is passed in main method?

3.       Difference between HashMap and TreeMap

4.       Difference between Exception and Error?

5.       Error can be handled? (OutofMemory Error example )

6.       Statement and Prepared Statement (Which is best in performance)

7.       Write a code for establish DB connection from Java (He asked to explain)

8.       How will you handle memory leakage in your java program

9.       Joins Basics

10.   Difficult scenario in your project

Thanks,

**Karthick K S**

FYI…

**From:** Sashi B Choubey   
**Sent:** Tuesday, January 27, 2015 1:33 PM  
**To:** Aribam G Devi  
**Subject:** FW: GS Questions

**From:** Sashi B Choubey   
**Sent:** Friday, January 23, 2015 3:23 PM  
**To:** Shrijith Shirnali; Umashankara Sharma; Purushottam Kumar(NABFS00)  
**Subject:** GS Questions

Hi All,

PFB todays questionnaire.

1st round :

Questions on current project

Questions on MONGO DB, when to prefer NoSQL vs RDBMS

Serialiazation, how to achieve and why its used

Whats the importance of Transient variable in Serialiazation,

Can a deserialized object be modified.

What is hashing and write your own heascode and equals method for Employee class.

What is Singleton design pattern and follow up questions.

What is finally block

Suppose I want three object connection objects, how to achieve that.

How to find if linked list has loop

How a ConcurrentModification exception is thrown and performing what operation while using an arraylist.

Questions on multithreading

How mapping is done in Hibernate and some cross questions

2nd round :

Questions on current & last but one project

Have you used Javascript, webservices

When to use treemap and linkedHashMap

Write the logic for implementing linkedHashMap

Why an extra hash function is called on Key.hashCode value in HashMap implementation

Write the different steps involved in JDBC connection

What does Class.forName(driver name) returns

Can Class.forName(driver name) be put in a static block

Questions on multithreading

In Class.forName(driver name), driver name is passed as a string, why

Can I pass any junk values instead of driver name

While wrting DriverManager.getConnection, we pass URL, user name & password. What happens internally(We get a connection, fine, but how ??)

How to identify and improve Java side code in an application.

What tool you have used for identifying memory leakages or for profiling java code

What have you used for unit testing

Questions on MockMVC .

Have you used any automated tool for integration testing

Regards,

Sashi Choubey

FYI..

**From:** Bhagvan Das   
**Sent:** Friday, January 23, 2015 11:51 PM  
**To:** Jai P Chinchankar; Kartik N Sapa; Narendra Babu Nasanakota; Rohit P Bansal; Deepak K Ram; Rajashekhar Ganamoni; Priti Yadav; Prakhar Tripathi; Dhiraj Kumar Choudhary; Aribam G Devi; Swati Khetrapal  
**Cc:** Sashi B Choubey  
**Subject:** GS F2F Interview Questions

Hi,

Please find the below questions asked in the GS interview.  
  
**1st Round :**

1. What is the SOAP web services.differentiate between SOAP and REST.
2. How to store the key,values as a object type.then what will happen if try to retrieve the object.
3. What is the design pattern did you use in your application.
4. One scenario he gave regarding the shipping and need to tell which design pattern is best suited.
5. String reverse program code.
6. Can we override the static method. If yes then how if not then why.
7. Some Questions from the memory management.how to handle OutOfMemoryError.
8. interface vs abstract.practical implementation.
9. Describe full SOAP and WSDL Structure.

**2nd Round** :

1. How to make class as a immutable.
2. what is the façade design pattern and full code with explanation
3. What is the <load-on-startup> is doing in web.xml
4. Singleton and full description in case of the multithreading environment.
5. Write code for the
6. Describe the servlet life cycle.
7. What is the difference between vector and Array list
8. What  is the difference between get and post method in servlet. what put method is doing.
9. What is the JAX-B. How internally works.What parser it uses and full process of marshaling and unmarshaling.
10. Did you works in producer side or consumer side.in consumer side what are thing you are doing to consume the web service.
11. What is the web server and what is the application server.
12. Explain the Exception Handling hierarchy. can you write the code for the run-time exception, checked exception.
13. What is the hibernate. what is the ORM.from which layer we are managing the transaction.
14. Describe the session.flush() and session.commit().
15. What is the reflection and how we are using in java.
16. What is the stored procedure.have you used stored procedure in your application if yes then write the code.
17. What are the no of row in the database which you are using in your project.
18. Some questions from the servlet.like life cycle and what are the servletconfig object and what are the servletcontext  object.
19. What is demarcation in oracle.
20. Some questions on hibernate framework internal working.(not remember the question).
21. Some questions from the Oracle database.(not remember the question).

Thanks & Regards,

Bhagvan Das

Senior Software Engineer

Mob : +91-9686470350 |Email :  [bhagvan.das@igate.com](mailto:bhagvan.das@igate.com)

FYI..

**From:** Bhagvan Das   
**Sent:** Tuesday, January 20, 2015 7:52 PM  
**To:** Priti Yadav; Swati Khetrapal; Rohit P Bansal; Narendra Babu Nasanakota; Sashi B Choubey; Prakhar Tripathi; Rajashekhar Ganamoni; Aribam G Devi  
**Subject:** GS interview Questions

Hi All,

Plese find the below questions that are asked in the GS 1st round

1.what is hashmap and if we are using object as a key then what we need to do.

2.what is the interface and what is abstract class.

3.what is the web services describe the soap based web servcies and what is the diffrence between SOAP and REST.

4.which datatypes is good for the currency.

5.how to find the first non repeated character from the string

6.in which design pattern did you works can you expalin the factory design pattern.

7.which testingframework did you use in your appication othre than junit.

Thanks & Regards,

Bhagvan Das

Senior Software Engineer

Mob : +91-9686470350 |Email :  [bhagvan.das@igate.com](mailto:bhagvan.das@igate.com)

FYI..

**From:** Deepak K Ram   
**Sent:** Friday, January 16, 2015 10:24 AM  
**To:** Bhagvan Das; Unnikrishnan Mundath; Aribam G Devi; Sashi B Choubey; Mohammad T Farooque; Jai P Chinchankar; Dhiraj Kumar Choudhary; KARTHICK SANTHARAM; Ravish Chugh; Rohit P Bansal; Shailaja S Dharmapura  
**Subject:** FW: GS\_interview

FYI  !

**From:** Deepak K Ram  
**Sent:** Friday, January 16, 2015 10:15 AM  
**To:** Purushottam Kumar(NABFS00); Shrijith Shirnali  
**Cc:** Umashankara Sharma  
**Subject:** GS\_interview

Hi Shrijith,

  Please find below decription of question in GS .

 1st round   
------------  
1)Experince of production support   
2)have work earlier indepdent work or alone or 2,3 member?  
3)have experince in sysbase database ?  
4)where  you have  face more challenging issue in current project and previous project, what is that , how to resolve that one ?  
5)do you any idea about banking domain project ?  
6)project description architecture and cross question on that.  
7)differnt type of key  and  there differnces ?  
8)what are keys and where u use  these key in project, explain the scenario atlest use 3or 4 key with table description ?

2nd round  
-------------  
            
1)oops concept  regrading java acheive 100 % object oriented progrming  or not  explain if  yes or no ,why  ?  
2)singleton through static block and  cross question,drawback  
3)chain of responsibility  
4)Data access  object  
5)difference between treemap and hashMap, internally working/sorting  difference between of treemap and hashmap.  
6)write custom method of   pop or peek operation on Stack ?  
7)differnce between equal and == and cross question diffrent scenario ?  
8)Mutithreading use in your project ?  
9)how many way we can acheive synchronizaton with code   ?  
10) describe soap message and wsdl file  
11)) write script for nth highest salary ?   
12)Have you worked on multithreading concept in your project ?

Thanks & Regards

Deepak K R

8197903127