**Interview Q**

**GS**

* **Unmodifiable collection**
* **Dynamically changing the thread pool/ logger level(log4j)**
* **Junit configuration**
* **Concurrent hashmap with their functions.**
* **Inputstream and Collections follows which design Pattern.**
* **Collections class and its dsign-Pattern**
* **Customize Annonator**

**Collection which can accept more than one value for key, without using separate chaining.**

**Log4j configuration from scratch.**

**Junit configuration from scratch.**

**BT**

* **Programming to interface Ex.(BT)**
* **Mutithreading for multiprocessor. How to achieve.(BT)**
* **Printing 2-D array in spiral.**
* **Reverse of linked-list with k nodes.**
* **Finding longest sequence**
* **HashSet, equal**
* **SQL – Delete duplicate rows.**

**IBS :[4 Nov]**

* **Dynamic class loading**
* **Concurrent hashmap**
* **String method intern**

**Altisource[11 Nov]**

* **Strong/Weak Reference(Altisource)**
* **Removal of duplicates from arraylist.(Altisource)**
  + **-Copy them to Hashset.**
* **How does it removes duplicate?** 
  + **Based on objects Hashcode and equals. Need to be checked????**

**Mind-Tree:[16 Nov]**

**To design the system keeping three things in mind:**

* **Scalable**
* **Extendable**
* **Security**

**How will you achieve this through java.**

**You need to deliver a SW. what things you keep in for delivering from day1.**

**Manthan[18 nov - Tele]**

* **Difference of** 
  + **application server and web server**
  + **Hash map and Tree Map**
  + **Iterator and Enumarator**
  + **Fail fast and fail safe**
* **Class def not found exception**
* **JSP-page thread safe**
* **Intern method of string**
* **JSP implicit objects**
* **Java memory leak**

**JP-Morgan[written][tele-14Jan]**

* **Create binary-tree manually and use this to inflat doubly-linked list in sorted order.**
* **TelePhonic(14Dec)**
* **What are the VM arguments.**
* **Serialize the object on other VM.**
* **Identify(display) the duplicate rows in table, and delete them.**
* **Which is efficient UNION or UNION ALL**

**Roamware[tele-13 Dec]**

* What is Aggregation/association
* Create stack without using any storage[array/arraylist]
* Define class in terms of OOPS

AmbarRoad[face 14 Dec]:

* Cloning deep-copy – write the code to explain.
* Bubble-sort.
* In given string print the char no. of times it appears.
* Synchronize with static and non-static mthod.
* How to serialize static variable?
* Filter concept
* What happens if init() method of servlet throws exception
* What happens if you call destroy() programmatically.
* Which is more efficient servlet or jsp?
* Disply emp-name and their mgr-name.
  + Schema(Emp-id, name, mgr-id)
* Find higest sal from each dept
  + Schema(Emp-id, Sal, Dept-id)
  + Schema(Dept-id, Dept-name)

ANZ[Tele 17 Dec]

* Why to override hashcode?
* Objects need to be pushed into treemap. What need to be added in object
* How to make Collection(List) immutable?
* Serialization person(serializable) extends emp(non-ser).
  + What happens if we try to serialize person.

HCL [Face -21 Dec]

Singalton downside

Digital-Harbor[Face 24 Dec]

* Map(instance vaar) is declared final can we put values?
* JSP implicit objects
* JSP tag lib
* Struts various types of action class
* Fibonaci series, given the no, arrange it into Fibonacci series.
* Display city and no. of times it appear.
  + Table(city, count)
* Display the row having maximum salary from following employee-table?
  + Emp(id, name, sal, dept)

HoneyWell[10 Jan]

* Display the Fibonacci series for input n.
* Without using JAVA-API some string op
* Link list simple operations.

Oracle[21/28 Jan/ 5 Feb/ 25 Feb]

* Why wait(), Notify() is in Object class.
* Print even and odd using two treads sequentially. One thread prints even and other odd.
* When destroy() is called in servlet.
* Synchronization in case of static method.
* When run[Thread] finishes thread dies then how come in executor service run callable/runnable without start.
* Two application uses different logging mechanism need to be merged. Provide the best solution to use one logging mechanism for merged application.
* Linux shed command.
* Few design patterns
* One recursive logic which I implemented IN JILLOADER.
* Flatten the linklist.
  + Link list has next and child.
  + Make this link list as normal link list. Having Just next by converting child node to next node.
* Array contains only 0 and 1 like – 100100111010100101
  + Return yes if u find it contains 101 or 010 else no. in linear order.
* JDBC : Difference between Prepared statement and statement
* Code for expression validation.
* Game[Chess] design.

Unisys(26th Feb):

Garbage collector finalizer and GC algorithms.

Ericcson (6th March;; 10th April)

* Java
  + Static int x=0;
    - How can u code so that it(x) has two values in single JVM.
  + Same classes(A) load by two classloader and ther objects are a1(CL1) and a2(CL2).
    - What happen if a1 instance of A2.
  + Consumer-producer in multithreading env.
  + Provide the datastructure for student-class data. Within the class roll no. is unique. But for two different classes it may be same.
  + How to know the running threads of threadpool.
  + Bucket concept of hashmap and it’s implementation. i.e how key-value pair is inserted with key having same hashcode and different equals?
* J2EE
  + Why global members are not declared in servlets?
  + How to call one JSP from another JSP.

SAP(15th March):

* Design a Snack-Ladder Game.
* Delete a node from the link-list when only node reference is give. (Note, here head is not given).
* Return the mid of the linked-list in just one iteration.

Yatra(23rd March):

* Design a billing system for shopping Mart.
* Difference between factory and abstract-factory.
* Deleting rows of table.

MorganStanley(March 14):

* How to make class mutable. And Advantage of mutable class.
* Given a text where words are separated by comma.

Count the occurrence of each word.

Display the 5 most no. of count word

* There are task each returns integers after finishing the job. Write a program which adds all 10 integers as soon as they are returned.
* There is one class with one Synchronized method(X), one static-synchronized(Y) and one non-synchronized(Z) method. Create two object of this class O1 and O2. Now create 5 Threads T1, T2, T3 ,T4 and T5. Which one of following will run in parallel :

T1 -> O1 ->X

T1 -> O2 ->X

T1 -> O2 ->Y

T1 -> O2 ->Y

T1 -> O1 ->Z

T1 -> O2 ->X

Polaris[31st May]

* What is exchanger?
* Semaphore
* Spring - >component and repository

Ariba

Undo and do in word – How does it work. Which design pattern is used.

Instace of -

SnapDeal

* Write the algo/program to print right-view of the Tree.
* While iterating the list, why it is not suppose to modify (structurally) it.
* Exception – ConcurrentModification.

HP

* How to configure IP address in your laptop?
* Architect of your project.
* What are different file system.

Oracle

How will you avoid serializing big array into the memcache.

**IGate (April-4/15)**

* Find the sub string in given string.

SQL:

* Two given tables :
* Emp (emp\_id, dept\_id, name)
* Dept(dept\_id, emp\_id)

Find all the dept having no employee.

**GE (April-11/15)**

* Implementation of blocking Q
* Find the outer bracket of given expression.
* Evaluate the expr 1/1! + 3/3! + 7/5! + 13/7! + 21/9!+ ….. + [f(n-1) + 2(n-1)]/(2n-1)!

**Socete General (April-11/15)**

* How to instantiate singalton design pattern using spring
  + Constructor is private and instatiation happens only through static getinstance() method.
* A bean of scope singalton is referring (say as property) another bean of scope prototype. How to instantiate new object of referred prototype object through singalton.
* Difference between get and load in hibernate.
* What is inheritance mechanism in hibernate and how to achieve it.
* Say parent class is referred by child then how to do the object mapping of these object to tables.

**Cisco (April-13/15)**

SQL – Find the age which appears second max no. of time in table(Employee, Age).

**Medlife (April-21/15)**

* What things you will see for making any application multi threaded.
* How to avoid creating multiple object using Serializable in Singalton pattern.
* Write a code to prove given tree is BST.
* A to Z is mapped with 1 to 26. Write a code to decode a numeric string into character message.
  + Input – 1 2 3 4 5 4 3 2 3 1 4 5 2 1 3 1 4…. Output - ?
* Implement getConnection() and Release() methods of connection-pool.
* Find a max positive sequence of a given series.
  + 2, -3, 7, -4, 5, 1, -2, 3, -2, -3, 4. Output - 7, -4, 5, 1, -2, 3

**Flipkart(April-22/15)**

* Give a input (As a file or java-class) for a table schema as (Dept, Emp, Sal)
* Write a code in java to find followings:

GS

Akosha (Apr-2015)

* Iterator Design Pattern
* Strategy Design Pattern
* Hash Map implementation
* Comparison sorting and non-comparison sorting.
* Bubble sort and radix sort
* Which data structure is used in Air traffic control.
* Providing a wrapper class for mem-cache implementation – remove, get, put.
* Generic

JP-Morgan

Deutch-Bank

IBM

Software-AG

EMC

* What is dependency-injection?
* Internals of Hash-map
* Executor framework

Special Preparation based on resume/previous interview exp

Mem-cache

How cache works

Write a code for caching

Architecture for Mem-cache

One-jar

Why one-jar? What problem it solves

Architecture of One-jar

Connection-Pool internals.

Write a program which simulates Connection-Pool.

Implementation of design-pattern general concepts

Undo and do in word – How does it work. Which design pattern is used.

Implementation of Algorithm general concepts

* While iterating the list, why it is not suppose to modify (structurally) it.