**Core Java -**

1.Difference between JDK JRE

2.What is byte code.

3.How HashMap works and what is the behind architecture

4.How equal and hashcode works in object class

5.Difference between ArrayList and LinkedList

6.What is LinkedHashMap

7.What is weak , soft ,phantom reference

8. How can we avoid using finalize  method

9.What is volatile variable

10.What is Atomic integers

11.What is difference between volatile and atomic variables

12.Difference between mutex and semaphore

13.what is difference between binary semaphore and mutex

14.How Executor works for thread pooling .

15.What is callable thread

16.How fork Join works

17.How can we make a class immutable

18.What is singleton , ways of creating singleton class

19.What is blocking queue with example

20.Produces consumer problem with wait notify and synchronized

21.Concepts of public , protected ,private , default for variables ,function and classes

22.Different way of invocating thread

23.What is abstract class and interface

24.Why Static class is used with example

25.Design Patterns Factory , Observer

26..What is finally method

27.What is minor and major garbage collector

28.What is generics and wild card

29.What is race condition

30.Diiferent type of synchronized

31.What is spin lock , Reentrant lock

32.What is thread local

**Spring -**

1.What is IOC (DI)

2.How can we achieve DI in plane core java code

3.What is AOP, with concepts with real time example

4. Different type of scope for bean in spring

5. What is the default scope

6. How spring security works , Authentication and login part

7. How JSP works and what is the life cycle

8. What are tag lib , how can we define our customized tag lib

9. What is interceptor and listeners in spring

10 . Different way of DI i.e Autowiring

11 . What if two same autowired by type , i.e when @qualifiers come in picture

12. What is filters and interceptors

13. How transaction annotation works in spring

14. Also read spring vs j2ee/Jee

15 . How sessions works in Spring

16. Different way of loading Application Context

**Hibernate -**

1. How hibernate works

2.What is the underline protocol for connection

3.What is dao and service layer

4.What is entity

5.What is session factory , is it thread safe

6.What is session , how it works

7. What is connection pool

8.What is difference between save , persist , save or update

9. What is difference between session.get and session.load

10.What is isolation in hibernate

11. What is the name of hibernate configuration file

12.Why constructor of hibernate is with no - arg

13. Difference between hibernate and jdbc

14.First Level , second level , query caching

15.What are the beans for hibernate needed to declare in Application context

16. What is the bean for transaction

17.How can we set isolation used by transaction annotation

**difference between jre, jdk and jvm**

**What is EJB session bean?**

**Types of memory area?**

**Unix command to get the processor running of a particular user**

**insertion and searching and why?**

**what is hibernate**

**How will you design to allow multiple JVMs to access data?**

**What is dependency injection in Spring**

**How will you sort HashMap**

**fork/join**

**How to select a specific controller?**

**Internal working of hash table, hash code?**

**Explain any design pattern except singleton?**

**Explain Synchronization**

**what is serializable? How to make a class serializable ?**

**What is benefit of indexes in database**

**what is serializable? How to make a class serializable ?**

**Explain HashMap, Set, Arraylist**

**Difference between Comparable and Comparator**

**Difference between Arraylist and Hashmap**

**Explain singleton design pattern**

**Why do you specify a hibernate dialect in configuration?**

**How to implement a interceptor?**

**What is trading done in your application**

**Give the differences between Arraylist and hashmap**

**What are futures, options, repo**

**hashmap implementation**

**What is portlet API**

**hashmap vs treemap**

**What is the use of Executor service completion method**

**final finally finalize**

**Tree Map and linked hash map**

**Types of memory area?**

**volatile keyword in java**

**diff b/w soap and rest**

**Barclays Phone interview questions:**

**Interviewer: Michael Schnee**

**1. Tell me about yourself**

**2. How your technical experience help you in your business role**

**3. He told me about his project**

**4. I asked him few questions about current project**

**5. Discussion on liquidity risk and the way it is implanted at Jpmorgan vs**

**Barclays**

**Barclays-**

**Manager- Shue wong, Rajan, Gustavo, Jason**

**Explained the project and asked how your experience aligns to the role.**

**Tell me about yourself.**

**Grilled on CS- Concentration project and JP projects**

**Ba- how will you deal with difficult users.**

**Tell me about the biggest project you have handled so far. What did you do?**

**Start to finish.**

**What is the biggest challenge you have faced and what did you do overcome it?**

**Agile sdlc.**

Client: Cognizant 28/07/14

Vendor: dts

How did you use inheritance to resolve issue in your project?

How did you use encapsulation in your project?

How did you implement exception handling in your project?

Why have you created your custom exception?

What is MVC framework?

What is the flow of MVC architecture?

How to select a specific controller?

Why do you specify a hibernate dialect in configuration?

What is EJB session bean?

Suppose you have 30% A type data and 70% B type data which collection to use for frequent deletion, insertion and searching and why?

Internal working of hash table, hash code?

Explain any design pattern except singleton?

Client : Mind Tree 25/07/14

Vendor: vati solution

Flow of MVC architecture?

IOC container?

How to specify a class as controller and modification in configuration file?

What is AOP?

How did you implement security in your project?

How to implement a interceptor?

Difference between interceptor and controller?

Miscellaneous

1. DCN – runtime notification
2. How to implement Order by Like Sql in comparator interface in Collection.
3. Batch Process + Transaction
   1. Batch Process + Transaction
4. Exception handling -> how to find actual cause when wrapping at multiple level
   1. Exp.getCause()
5. Concurrent hasMap how to write efficient logic in multi thread environment if trades are coming more than 10,000/sec updates
6. How to decide the thread pool size , 8 cores, 12 GB RAM
7. Builder design pattern disadvantage
8. How to decide/design asynchronous system
9. Disadvantage of EhCache
10. Issue with Spring 4.4
11. Exception in thread how you will capture in main thread
12. Core call blocking forever in thread pool how to resolve this situation
13. Marker interface
14. Using Multithread to core but one thread writing to core ,but one thread writing to concurrent hashmap ,is it equal to single thread environment.
15. Array of 10 elements, how multiple thread can write efficiently.
16. How you decide the size of thread pool.
17. GC logs , Young generation , old generation …what is the means if old generation increasing.
18. Batch Request in SQL
19. Websocket
20. Why Weblogic needs to restart if RAM allocated to Weblogic process 18GB.