# GlassDoor

**Implement BST with Unit test cases with Docker container running.**

**Atomic vs Volatile Clustered Index Design Pattern**

**Array , largest element 2. K largest element**

**Remove duplicate characters from a string**

**Find nth largest/smallest number in an array**

**What are enhancemets in java8 for memory management**

**OvalEdge:**

Find max product of subarray for the given integer array.

Find max sum of subarray for the given integer array.

Find max length of subarray whose sum is greater than given value.

Find first non repeating character in a string.

Difference between comparable and comparator.

How to deploy git repository using jenkins?

Implement a POST API using spring boot.

.

Write a program to using hash map to store employee based on age in descending order.

Write a program to using stram api to filter employee based on age.

What is optional in java8, explain.

What is static and Heap memory?

Program to find all the patterns of 0(1+)0 in the given string 2. Program to replace all 0's with 1 in a given integer

Write a program to print natural number using two threads odd and even number by order

 login page is validating user id and password by getting details from the database. But as the database has billion of rows and it is getting a long time to fetch the data from the database hence throwing errors. What should be the short-term and long-term solutions for this issue

?

. CI/CD pipeline. Find duplicate array counts. Merge 2 array in below way. X={a,b,c,d} Y={p,q,r,s} Output Z={a,p,b,q,c,r,d,s} Print 1-100 prime number?

Program to merge 3 arrays into 1 array.

Program to find sum of all the tree nodes.

Take two int and return array where first index will be addition of two int and second index will be total carry that occurred during addition.

Program to find length of characters

Write a function to print "both" if the given no is divisible by 5 & 3 and print "5" if the given no is divisible by only 5 and print "3" if the given no is divisible by only 3.

Write down the function to count the individual digits from numbers in the given sequence.

Write a program to bring output like a,b,ab,ba

Senior Java Developer/Lead at VMware was asked...

Kanban, why we use if support team came and ask that in prod databases are not getting connected, what will be your fix? Double queue operating principal design patterns singleton/prototype pattern what is the negative of singleton does siblgleton create different instances for diff JVMs? how to restrict that drawback in singleton why we use data structures print vs println set vs tree set http methods, patch vs put "print below matrix: 1 2 3 4 5 16 17 18 19 6 15 24 25 20 7 14 23 22 21 8 13 12 11 10 9 " sevice vs repository 2nd round : Service layer prototype bt controller is singleton is it possible?? what App server we are using? Security schemes for the project What encryption we use how to give rolebase access to an application Dom parser vs xml parser SOAP vs Rest Search engine used in project Why we need connection pool connected always singleton pattern an prod application giving OUT OF MEMORY error. How to resolve?? Shopping cart system design Workflow after add cart from developers perspective What too we use for prod deployment web server vs app server finalize method how you use load balancer in your project how to approach SLA tasks caching for performance aspect why we need normalization load profile for performance testing transaction for performance testing

Develop a POC of train reservation service using Spring Framework, restricting use of Collections only to Queue.

What are the different encryption technologies?

Explain different http methods.

Write a Java program to find permutation of a string.

Difference between @Component and @Service.

What is the Lifecycle of Sevlet?

What are the different data types present in javascript?

Hackerank OA questions: 1) Question related to upper and lower bound of an array. 2) some map question. Round 1: 1) Two sum question without extra space 2) SQL join implementation in Java Round 2: 1) Longest palindrome 2) Prototype inheritance in JavaScript.

what is difference between linked list and array list? about classloaders? garbage collectors? interface abstract class dependency injection trremap and hashmap

What is LDAP? Advantages of LDAP over Database?

Design application with employee department, explain from scratch how to implement

Fiserv:

Code review best practices Slowness in your application, what's your approach Security in your current application, Explain end to end Solid principal Design pattern (Factory Pattern, Abstract Factory, Factory Method pattern?) Dependency Injections Performance improvement of web application startup Major challenge in Current project

Coding Test: \*\* Using normal loops not to use any collections classes Array-1 [2,3,7] Array-2 [4,5,8] Final Output as below: [2,3,4,5,7,8]

AOT in angular Idempotent in rest API Lazy loading in angular Difference between merge and rebase? How to create git branch ?

CGI:

Tell me about yourself? Oauth implemntation? Angular related questions.

What if a service is acting slow - how to identify and handle it? How to perform caching?

The second program he asked was: Write a program to find the given number is binary or not Input:101 Output:true

@transactional annotations. how it works which design pattern.it uses.

Find middle value in an array?

write directive and pipe in angular

find the largest and smallest of three numbers

JP:

Immutable class Immutable collection Exceptions in inheritance Interface vs Abstract How to prevent Singleton Pattern from Reflection, Serialization and Cloning? Atomic operations what-is-a-serialversionuid-and-why-should-i-use-it If you are trying to restore (deserialization) empdata.dat to the Employee class, you can see it is not correct. Those are two different formats. Note: Technically, this will deserialize without error, skipping the missing field. But your business logic output may not as expected. Transient super.super() why to implement hashcode and equals in java Notify and NotifyAll Thread safety in singleton Static methods cannot be overridden because they are not dispatched on the object instance at runtime. How ConcurrentHashMap Works Internally in Java

Create a link list from Array without using inbuild class. 3. Write to the program to sort complex objects like a laptop on basis of price (Collection- comparator and comparable)

how will u design a restaurant application6. default scope of dependency in maven. 11. time complexity improvements in java 8

 angular lazy loading in angular and data binding rest service structure mysql queries 5 why string are literal

  Internal working of java 8 stream api

# FullStack:

.? 5. Executors classes? 6) Question related to upper and lower bound of an array.  Static method can be override? Static method can be overloaded? ECMA means? Which is latest ECMA version being used and new features introduce? Arraylist v/s Hashset, Which will perform fast and provide time complexity? contain() v/s compareTo() methods in collections? How hashset works internally, what have changed in java-8? Exception handling in java project Various types of Directives in angular Expressions in angular What all way you communicate with other components, give your opinion on same? AOT in angular? Multithreading handson, if any? Testing frameworks have you used any & which one use for angular? Scenario: you have dropdown list based on some condition want to populate grid data, How will you design end to end? Coding question: Find duplicate elements in array, How to remove same?

 Explain end to end Solid principal Design pattern (Factory Pattern, Abstract Factory, Factory Method pattern?) Dimond problem removal steps in java-8?

spring lifecycle proxy objects spring transactions

HTML 5 new tags In jQuery remove vs detach Diff DIV vs Table and margin vs padding span vs div

Program to handle multithreaded transactions in java.

Write a program to pick the LinkedList head stored in an array such that each list falls into the same group. LinkedList optimization

Delete a given node from a Linked List without using extra memory.

Explain about interceptors?

Dynamic method in interface, routing in Angular, number sorting

What would you choose for a password field in JAVA, a character array or String?

how to prevent deadlock in java multithreading

Write a program to check string permutation

what is main difference betn linkedHashMap and hashMap?where should we use them?

How can you find total number of instances created for a class?

angularjs parent controller

Without using the id of the setInterval function, how will you cancel all the intervals in your page?

What are the parameters need to consider for designing microservice?

Design a microservice for an eCommerce platform.

# InterviewBit

JVM

**PremGen:** MetaData information of classes was stored in PremGen (Permanent-Generation) memory type before Java 8. PremGen is fixed in size and cannot be dynamically resized. It was a contiguous Java Heap Memory.

**MetaSpace:** Java 8 stores the MetaData of classes in native memory called 'MetaSpace'. It is not a contiguous Heap Memory and hence can be grown dynamically which helps to overcome the size constraints. This improves the garbage collection, auto-tuning, and de-allocation of metadata.

What are the various categories of pre-defined function interfaces?

**Function:** To transform arguments in returnable value.

**Predicate:** To perform a test and return a Boolean value.

**Consumer:** Accept arguments but do not return any values.

**Supplier:** Do not accept any arguments but return a value.

**Operator:** Perform a reduction type operation that accepts the same input types.

**Intermediate Operations:**

* Process the stream elements.
* Typically transforms a stream into another stream.
* Are lazy, i.e., not executed till a terminal operation is invoked.
* Does internal iteration of all source elements.
* Any number of operations can be chained in the processing pipeline.
* Operations are applied as per the defined order.
* Intermediate operations are mostly lambda functions.

**Terminal Operations:**

* Kick-starts the Stream pipeline.
* used to collect the processed Stream data

### What are the most commonly used Intermediate operations?

**Filter(Predicate<T>)** - Allows selective processing of Stream elements. It returns elements that are satisfying the supplied condition by the predicate.

**map(Funtion<T, R>)** - Returns a new Stream, transforming each of the elements by applying the supplied mapper function.= sorted() - Sorts the input elements and then passes them to the next stage.

**distinct()** - Only pass on elements to the next stage, not passed yet.

**limit(long maxsize)** - Limit the stream size to maxsize.

**skip(long start)** - Skip the initial elements till the start.

**peek(Consumer)** - Apply a consumer without modification to the stream.

**flatMap(mapper)** - Transform each element to a stream of its constituent elements and flatten all the streams into a single stream.

### What is the most common type of Terminal operations?

* collect() - Collects single result from all elements of the stream sequence.
* reduce() - Produces a single result from all elements of the stream sequence
  + count() - Returns the number of elements on the stream.
  + min() - Returns the min element from the stream.
  + max() - Returns the max element from the stream.
* Search/Query operations
  + anyMatch() , noneMatch() , allMatch() , ... - Short-circuiting operations.
  + Takes a Predicate as input for the match condition.
  + Stream processing will be stopped, as and when the result can be determined.
* Iterative operations
  + forEach() - Useful to do something with each of the Stream elements. It accepts a consumer.
  + forEachOrdered() - It is helpful to maintain order in parallel streams.

### What is the feature of the new Date and Time API in Java 8?

* Immutable classes and Thread-safe
* Timezone support
* Fluent methods for object creation and arithmetic
* Addresses I18N issue for earlier APIs
* Influenced by popular joda-time package
* All packages are based on the ISO-8601 calendar system

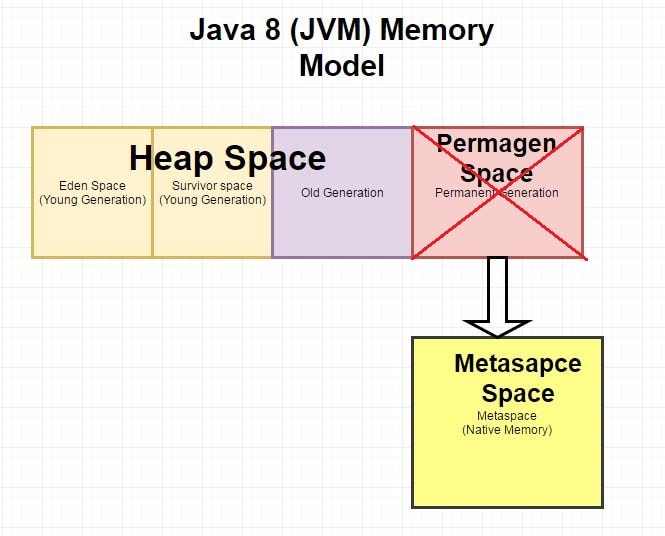
### Define Nashorn in Java 8

Nashorn is a JavaScript processing engine that is bundled with Java 8. It provides better compliance with ECMA (European Computer Manufacturers Association) normalized JavaScript specifications and better performance at run-time than older versions.

### 33. What is the use of JJS in Java 8?

# As part of Java 8, JJS is a command-line tool that helps to execute the JavaScript code in the console. Below is the example of CLI commands: Java - Metaspace vs PermGen space

[](https://srv.carbonads.net/ads/click/x/GTND42JJF6SIT27MCAYLYKQNC6AIEKJMF6YD4Z3JCYYIL53WCAYDVKJKC6YICKJNCKYDE53IFTYI4KQWCESD55QMHEYIKKQ7CAYDV53ECTNCYBZ52K?segment=placement:wwwjavainusecom;)[Limited time offer: Get 10 free Adobe Stock images.](https://srv.carbonads.net/ads/click/x/GTND42JJF6SIT27MCAYLYKQNC6AIEKJMF6YD4Z3JCYYIL53WCAYDVKJKC6YICKJNCKYDE53IFTYI4KQWCESD55QMHEYIKKQ7CAYDV53ECTNCYBZ52K?segment=placement:wwwjavainusecom;)[**ADS VIA CARBON**](http://carbonads.net/?utm_source=wwwjavainusecom&utm_medium=ad_via_link&utm_campaign=in_unit&utm_term=carbon)

In [previous chapter](https://www.javainuse.com/java/permgen) we saw JVM memory model till java 7 and before. In this chapter we look at JVM memory model for Java 8. It is as follows-  
  


Java Metaspace:

So what is Metaspace and how is it different from PermgenSpace.  
With JDK8, the permGen Space has been removed. So where will the metadata information be stored now? This metadata is now stored in a native memory are called as "MetaSpace". This memory is not a contiguous Java Heap memory. It allows for improvements over PermGen space in Garbage collection, auto tuning, concurrent de-allocation of metadata.

Difference between PermGen space and MetaSpace.

|  |  |
| --- | --- |
| **PermGen Space** | **MetaSpace** |
| PermGen always has a fixed maximum size. | Metaspace by default auto increases its size depending on the underlying OS. |
| Contiguous Java Heap Memory | Native Memory(provided by underlying OS) |
| Max size can be set using XX:MaxPermSize | Max size can be set using XX:MetaspaceSize |
| Comparatively ineffiecient Garbage collection. Frequent GC pauses and no concurrent deallocation. | Comparatively effiecient Garbage collection. Deallocate class data concurrently and not during GC pause. |

In [previous chapter](https://www.javainuse.com/java/permgen) we saw how we got a permgen space error on running the following program. We analyzed the gc verbose logs. please follow the steps mentioned in [that chapter](https://www.javainuse.com/java/permgen).

package com.javainuse;

public class TestMemory {

static int i = 0;

public static void main(String[] args) {

if (i < 25) {

i++;

System.out.println(i);

main(new String[] { (args[0] + args[0]).intern() });

}

}

}