**Interview Questions**

**JAVA:**

**Basic:**

* What are features of Java?
* What are features of OOP?

Inheritance

Poly

Encap

Abstract

Data hiding

* What is difference between overriding and overloading?
* Do private members get inherited in child class?
* What is benefit of inheritance?
* What are different access modifiers?
* Can you use more than one datatype in for loop?
* Can you use ‘break’ outside loop or switch case?
* Can you use final variable in switch case?
* Can you use a final variable as a case in switch case?
* If you have a switch case inside a loop, then what will get break, loop or switch case?
* What data types can be used for switch case? – int,char,byte
* Which version of JDK introduced foreach? 1.5
* Which version of JDK introduced Regular Expression?1.6
* What is new in JDK 1.x? (x = 1-8)
* How the atomic double/long/float/integer works?-?

**Exceptions:**

* What is parent class of Exception? - throwable
* What are types of Exceptions? -
* What is checked/unchecked Exception?
* What is the use of checked/unchecked Exception?
* Why unchecked exception doesn’t force you to handle it?
* Why we use custom exceptions?

**Collections:**

* Why collection is required? – collections are used in situations where data is dynamic
* What is memory leak? – not free
* What are different types of collections? – list,set,queue
* What is parent class of Collection? – iterable(iterator interface is different)
* Which Collections allows duplicates? – lists,and map allows duplicate values but not keys
* What is difference between ArrayList & LinkedList?
* **Advantages of Collection Framework**
* How LinkedList is internally arranged? – doubly linked list
* Which interface LinkedList implements? - List and deque interfaces
* What is unique feature of Set? – unique elements
* Which is the fastest performing Set?
* Hashset uses hashmap internally
* If hashCode & equals are not written for class in a Set then what happens?
* Which collection is used in Movie Ticket Booking?
* When you will implement Comparator/Comparable?
* What is TreeSet internally? - binarysearchtree
* What is difference between ArrayList & Vector?
* Why Vector upgraded to ArrayList?
* Iterator interface provides the facility of iterating the elements in a forward direction only.

**I/O:**

* What are types of Streams? (Byte Stream & Character Stream)
* A stream is a sequence of data. In Java, a stream is composed of bytes. It's called a stream because it is like a stream of water that continues to flow.
* Why do you use Character Stream? (To Internationalize Application)
* Why do you use Byte Stream? (To use in Images, Audio, Video, etc.)

**Serialization:**

* Why do you use Serialization? (To save Object in secondary storage)
* Is constructor called when you deserialize an object? (No)
* Which exception will be thrown when you try to deserialize an object when the Class is not present? (ClassNotFoundException)
* What will happen if you don’t implement Serializable class and try to serialize object? (Throw NotSerializableException)
* If an Address class variable which is not implementing Serializable is inside Employee Class which is implementing Serializable then will get serialize? (No. Address class should implement Serializable)
* What is the use of transient? (To mark the attribute not to be serialized)

**JDBC:**

* What are advantages of JDBC?
* What are different drivers of JDBC?
* Which is best driver in JDBC and Why? (Thin Driver)
* What are the interfaces & classes in JDBC?
* Which method executes DDL & DML statements? (executeUpdate)
* Which method executes SELECT statements? (executeQuery)
* Which method executes all statements? (execute)
* How to check if record exists or not? (resultSet.next())
* What is difference between Statement & PreparedStatement?

**Servlets:**

* What is the need of Web Server?
* What is different between Web Server & Web Container?
* To qualify Component as Web Server which methods needs to implemented?
* What is lifecycle of Servlet?
* Why we don’t use parameterized constructor in Servlet class?
* What is ServletConfig?
* How many ServletContext present per web application?
* Why we don’t override service() method of HttpServlet in Servlet?
* Which exceptions service() method throws?
* When servlet throws ServletException?
* What are different ways of Session Management?
* Which exception does destroy() throws?
* What are methods in Servlet Interface?
* What is difference between forward() and include() method of RequestDispatcher?
* What is difference between include directive and include() method of RequestDispatcher? (include directive is static during translation phase on the other hand include() method decides resource to be included at runtime)

**JSP:**

* What are implicit objects in JSP?
* What is difference between JSTL & EL? (In EL you cannot display nested properties)
* What are tags in JSTL?
* Is JSTL outdated?
* What are action tags in JSP?
* What are different scopes of JSP action tags? (page, request, session, application)

**Java 1.8 Features:**

* What are advantages of Lambda Expression?
* What is SAM? (Single Abstract Method)
* What is Functional Interface? (Interface which contains SAM)
* What is annotation for Functional Interface? (@FunctionalInterface)
* What are different Functional Interfaces? (Runnable, Consumer, Supplier, Predicate)
* In which packages they reside? (java.util.function)

**HTML:**

* What are features of HTML5?
* What are subtypes of text type in input tag?
* What are validations done on input tag?
* What is a placeholder?

**CSS:**

* What are types of CSS?
* What are the advantages of CSS?

**JavaScript**

* What is the use of scripting programming language?
* What is DOM? (Document Object Model)
* How you will insert text into a div?
* If javascript code is written inside head tag, when it will get executed?
* What are different message box provided in JavaScript?

**MySQL**

* What are constraints in MySQL?
* What are domain constraints?
* How do you implement sequence in MySQL? (AUTO INCREMENT)
* What are Joins?
* What are different Joins?
* What is LEFT JOIN & RIGHT JOIN?
* Which is better Joins or Subqueries?
* What are Views?
* What are types of views?
* How can you implement FULL OUTER JOIN in MySQL?
* Does CHECK constraint work in MySQL?
* What is difference between CHAR & VARCHAR?

**Angular**

* What are advantages of Angular?
* Which architecture Angular follows? (MVVM)
* What are structural directives? (\*ngFor & \*ngIf)
* What is two way binding?