* JVM
* JRE
* How do you write a Hello world program
* What is Final keyword
* What is Static keyword?
* What is void
* What is for loop
* While loop
* Do while loop
* Switch statement
* Final, Finally, Finalized
* Why public static void main
* What is This and super keyword
* What is a public access modifier
* What is Private
* What is Protected
* What is the difference between abstract class and interface – abstract class can have a constructor, we can extend one abstract class and implement an interface
* <https://www.google.com/imgres?imgurl=https://i.stack.imgur.com/Ci5Wx.png&imgrefurl=https://stackoverflow.com/questions/1913098/what-is-the-difference-between-an-interface-and-abstract-class&h=363&w=654&tbnid=agE3KU4I20PJYM:&tbnh=116&tbnw=210&usg=__GGIfc6_TKYKyrTqKy1OpoF08u-0=&vet=10ahUKEwi_hcDmjcPVAhVISyYKHdIRAd0Q9QEILDAA..i&docid=GXY16je2BhccPM&sa=X&ved=0ahUKEwi_hcDmjcPVAhVISyYKHdIRAd0Q9QEILDAA>
* Exception handling in java – check- come at runtime, compile time : IO,SQL, unchecked- Arithmetic, null point, and error – cannot be handled .
* Diff = and ==- == is a reference comparison, both objects point to the same location. Null can be compared with == and not .equals
* Diff between throw, throws and throwable – Throw is a keyword which is used to throw an exception manually, can throw and exception from any method or a block.

Throws is a keyword in the method signature to indicate that this method may throw mentioned exceptions

Throwable is a super class for all types of errors and exceptions in Java.

* What is a constructor- It is invoked at the time of object creation. It constructs the values, it provides data for the object. Constructor name must be same as its class name.

It must have no explicit return type.

* What is polymorphism - It is a way by which we can perform a single action by different ways. Compile time and run time. We can perform them by method overloading and method overriding.
* What is Encapsulation – Binding all the data into a single part, to make it open set us and get us
* Method, Diff between method and constructor-
* What are the packages in Java – java. lang, jav. util, java.awt
* Diff String, String buffer and string builder - <https://www.javatpoint.com/difference-between-string-and-stringbuffer>

String is immutable, thread safe, slow

Mutable, fast,

Mutable, not thread safe, stored in heap

* Collection in java – It is a framework provides an architecture to store and manipulate in java. Perform actions like searching, sorting, insertion, manipulations and deletions. List, Set and Map
* Diff between array and array list in java – Array fixed length,

Arraylist – cannot store objects and primitives.

* Scope of a variable – A variable can be either of Global or local. A global variable is a one which is declared in the main method of the source code outside all functions. Local – Declared within the body of a function or a block.
* **Garbage collection** – When an object is not referenced anymore, this happens and the object is destroyed automatically. For automatic GC java calls either calls system.gc or runtime.gc
* **Singleton class** – It can have only one instance and hence all its methods and variables belong to just one instance. It is used when there is a need to limit the number of objects for a class.
* **What is Hash table** – It is a legacy collections type. It is synchronized. We use enumerator to go from one value to another.
* **What is an Iterator**- Used to traverse through the program.
* **What is List iterator** –
* **Steps to connect database in java**

Import JDBC packages

Load and register the JDBC driver

Open a connection to the database

Create a statement object to perform a query

Execute and return a query result set

* **How to read a file in java** -
* **How to write to a file in java** - <https://www.caveofprogramming.com/java/java-file-reading-and-writing-files-in-java.html>

Selenium

* **Data driven framework:**
* **What is POM:**
* **What is BDD**
* **What is Hybrid framework**
* **What is TDD**
* **Why cross browser testing**
* **How do we handle window pop ups - Auto IT, Robot classes**
* **How do you select radio buttons**
* **What is ATDD**
* **How do you take a screenshot?**
* **How do you work on**
* **In a table of 8X8 how do you go to 6X7? – Using collections**
* **What are the different waits in Selenium? Hard wait – Thread.sleep, Soft wait- Implicit, explicit and fluent**
* **What is Is selected and**
* **How do you handle**
* **Headless Browser**
* **TestNG annotations**
* **Assert – Soft – condition is false it continues and Hard does not continue**
* **First step to load selenium webdriver.**
* **Selenium Grid**
* **Driver.close and driver.quit**
* **Findelement and find elements**
* **Navigation commands**
* **Different Locators**
* **How to refresh a page in Selenium – driver.navigate.refresh**
* **How to take a Screenshot**
* **What is a verify command**
* **Diff between / and //**
* **How to get data from a text area and data from a label. Get attribute(value)**
* **Advantages of webdriver over Selenium server**
* **How do you delete cookies – driver.manage.deletecookie**
* **What is a parameterized method**
* **Hierarchy in XML file**
* **How to get the color value**
* **General exceptions**
* **Mouse and keyboard actions**
* **Limitations of Selenium**
* **Relative Xpath**
* **How to perform double click – context click, actions class**
* **Diff between get window handle and get window handles- Current browser and …will return string and list**
* **How to switch back to the default page from a frame**
* **From a test script how do you create a html test script**

**Using inbuilt**

**XSLT reports from ANT Selenium**

**ANT TestNG**

* **How do you retrieve dynamic changing ids’?**
* **How do you find broken images in a page – Get the xpath and all the links using tag name. In the page click each and every link and look for status codes 404 or 500 in the target page title.**
* **Annotations present in TestNG and not in Junit**

@before suite - @after suite

@before test - @after test

@before group - @after group

@before provider – @after provider

* **What is the main use of data provider -**
* **How to run the test cases in parallel**
* **Why should we give thread count**
* **How do we use groups in TestNG**
* **How to launch a browser**
* **How do we download files**
* **Why do we customize xpath**
* **When are test cases skipped without being executed**

1. If the before test fails
2. Depends on methods.

If a previous test case fails then this would be skipped

* **How do you upload a file using Selenium**
* **What is Page factory**
* **Why do we use Maven or ANT as a build management tools**

To run multiple xml files, maven is helpful

ANT – Does not have dependencies.

* **If you want to run the test cases in Jenkins which browser will be used. Where do we run test cases in Jenkins, in which environment**. AWS, Sauce labs, Selenium grid
* **How do you handle colors in Selenium webdriver –** using css selector

Get value function to get the colors by sending colors string as an argument

* **How do you read the data from excel sheet. –** Apache POI, XSSF workbook

We use apache POI and then we read workbook, sheet name, row, column and cell value

* **What is an Object repository? –** A place where we have

It can be implemented with the key being a logical name, identifying an object and the value containing unique objects, property used to identify the object on a screen. Selenium offers no implementation by default.

* **How to automate webservices –**
* **What are the different levels of log4J**
* **What do we include in POM.xml**
* **What is a headless browser and why do we use them**
* **Maven commands – mvn clean to clean the class file**

To generate mvn update

Mvn build to run

Mvn install

Mvn compile to execute

* **Different types of desired capabilities methods**
* **What is a remote web driver in Selenium Grid-** It is used to set the node. On which node or machine that our test will run against
* **What are the three things that we add in dependencies –** group id, artifactid and version
* **What are the files in cucumber**

Feature file

Step Definition

* **Name few GIT commands**
* **In cucumber how do you run TestNG –** Cucumber cooks package is imported
* **How do you handle dropdowns -** static and dynamic
* **Selenium grid**
* **How do we handle alerts in Selenium**
* **Types of exceptions in selenium**
* **How do we synchronize the code**
* **Why TestNG and not Junit**
* **How do you run test cases in different environments -**

Manual

* **Test plan document and test strategy**
* **Different meetings in Agile –** Planning poker games, Defect triage meeting, grooming sessions
* **Priority and severity –**
* **Contents in a test –** Id, name attachments,
* **Verification and validation –** static and dynamic, verification takes place before validation
* **Entry and exit criteria –**

**Exit –** technical documents to be submitted by release nodes

* **STLC –**
* Levels of Testing - Unit Testing

Integration

System testing

UAT – It is beta testing done by actual end users

* **Regression Testing -**
* **RTM –** It maps user requirements to all the test cases
* **What is boundary testing –** Boundary value analysis
* **How do you calculate the code coverage? –** Total number of lines covered from the requirements divided by total number of requirements X100
* **How do you explain to the developers that a bug is a showstopper bug?** Initially take screenshots and make documentation and mail it to the developers for them to have prior knowledge before the meeting.Prioritize what test cases to be completed for the upcoming release.
* **What happens in a grooming session** –
* **What is white box and black box testing –**

**How do we add custom dependencies- create a jar and convert it to dependency.**

**Pipeline in Jenkins – the regressions suites that have to be executed are said to be in pipeline.**

**Failure criteria for load testing –**

**Custom property tag in SOAPUI**

HR