**Apache JMeter** is an [open source desktop application](https://www.educba.com/microsoft-office-application/) which is developed in pure Java, widely used for load testing, performance testing, and functional testing of web applications.

It was originally designed for load testing of web applications. JMeter is capable of simulating load on a server by creating virtual concurrent [users to the web application](https://www.educba.com/how-to-build-web-applications-using-mongodb/).

As it is an open-source application we can download the source code and modify it according to our needs. It performs load testing by sending requests to the server like a web browser requesting a web page and collecting the response from the server and visualizes through graphs, bar charts etc. and process the output and represents the output in different formats like XML, JSON etc. which will be useful for analyzing the results.

JMeter advantages are as open source, ease of use, platform independent, ultimate testing, robust reporting, flexibility, and multi-protocol support and disadvantages are memory consumption, supports only web applications and lack of [support for JavaScript](https://www.educba.com/cheat-sheet-javascript/). JMeter becomes popular and mostly used for performance testing by most of the companies.

Below are the **10 important JMeter interview questions** and answers that are frequently asked in an interview. These questions are divided into two parts are as follows:

**1) What is the use of regular expression in JMeter?**

**Answer:**  
Regular expressions in JMeter can be used to extracting some values dynamically from the response and we can use the intermediate results in subsequent requests to the server or save it for reporting purpose. Regular expressions can be used in both pre-processors and post-processors.

**2) Explain the flow of Test script recorder?**

**Answer:**  
The flow of test script recorder is used to record all the HTTP(s) requests going to the server from the application and in order to make it work we need to do some settings in the [JMeter application](https://www.educba.com/jmeter-vs-gatling/) as below:

* We need to add HTTP(s) test script recorder to the workbench.
* We need to mention the port number from which we want to start our proxy server from and
* We need to select a workbench or add recording controller as a target in the test plan and need to select same as the target so recordings will store under at one place and start the proxy server.
* We need to configure our browser with manual proxy settings with port number same as in the test script recorder.

**3) Can we run selenium scripts on JMeter? If possible, how?**

**Answer:**  
Using JMeter we can able to [run selenium scripts](https://www.educba.com/uses-of-selenium/) to get the performance of them and we can able to achieve this in two ways, one way can be using JUnit libraries to [build selenium scripts](https://www.educba.com/selenium-commands/) and save as Jars and copy the same in JMeter directory and add JUnit sampler to the test plan and import Jar file. Another way is by adding web driver sampler plugin to the JMeter ext folder and restart the JMeter and we need to write selenium code in the web driver sampler in order to see the performance.

**4)What are the roles of the listeners in the JMeter?**

**Answer:**  
This is the common JMeter Interview Questions asked in an interview. The roles of the listeners in the JMeter is to save the outcomes of the test after viewing the same as they are very useful when it comes for tabular analysis and graphical analysis of the outcomes. Some of the listeners which are frequently used areas the aggregate graph, view results tree, and an aggregate report.

**5) What are the main parts of the thread group?**

**Answer:**  
The main parts of the thread group in the JMeter are a controller, sampler, assertion, configuration elements, and listeners and their functionality is as below:

**Controller**: Controller will control the flow of the thread group in JMeter.  
**Assertion**: Assertion is responsible for the time management as it will check whether a response is there for a request in a specific amount of time.  
**Sampler:** It will send different requests to the server in the JMeter.  
**Configuration elements:** It is used to manage information related to the requests which are integrated with the samplers in the JMeter.  
**Listener:** It will save the final output of the task.

**6) What are post-processors in the JMeter?**

**Answer:**  
The post-processors in the JMeter are similar to the pre-processors but these will be used after the accomplishments of the sampler request and it can be easily used when we need to take values from the sampler response.

**7) Explain the execution order of the test elements?**

**Answer:**  
The execution order of the test elements is as follows:  
a. configuration elements  
b. Pre-processors  
c. Timers  
d. Samplers  
e. Post-processors  
f. Assertions and  
g. Listeners

**8) How to manage cookies and sessions in the JMeter?**

**Answer:**  
We can manage cookies and sessions in the JMeter by using config elements such as HTTP cache manager which can clear the cookies in every iteration and allows users to add user-defined cookies. It also helps to clear the cache as per user requirements in the load tests and it can limit the number of elements can be stored in the cache. These config elements can be attached to the listener.

**9) What is a workbench in JMeter and why it is required?**

**Answer:**  
This is the most popular JMeter Interview Questions asked in an interview. Workbench is a storage area which can be used to store the components which can be added to the test plan if required. The components of the workbench are not saved automatically with test plan we need to save them as test fragments. One of the most important parts of the workbench is https request test script recorder which can be used for recording the https request and load can be applied on it to measure the performance.

**10) What are the types of controllers in the JMeter?**

**Answer:**  
Controllers in the JMeter are used to control the flow of the requests and some of the controllers used in the JMeter as below:  
a. IF controller  
b. While controller  
c. Recording controller  
d. Transaction controller  
e. Simple controller  
f. Loop controller and  
g. Module controller