1. **What is the main goal of automation?**

In my opinion, Bug detection is not the main goal of software testing.

The main task of software testing is to obtain information about the readiness status of the declared functionality of the system or application. The task of obtaining the readiness status is usually implemented as checking the scenarios for using the system in valid and invalid conditions of use, which are formed by sets of input data and states, operations or data received by the tested functionality and a set output data and system states.

The identified errors are a by-product of the software testing task, since they are not directly necessary and useful to the Testing Customer.

Detected bugs should be fixed, and then it is necessary to make sure that no new defects were introduced during the elimination process. However, it is known that it is almost impossible to detect all possible defects in the software product.

1. **When is it preferable to start the automation?**

Whenever automation can significantly reduce overall test execution time and overall cost of project, you should use it.

Regression Testing: For re-testing pre-existing application functions that are being carried forward to new versions (usually the majority, unless app is brand new)

Smoke Testing: For getting a quick high-level assessment on the quality of a build and making go / no-go decision on deeper testing

Static & Repetitive Tests: For automating testing tasks that are repetitive and relatively unchanging from one test cycle to the next

Data Driven Testing: For testing application functions where the same functions needs to be validated with lots of different inputs & large data sets (i.e. login, search)

Load & Performance Testing: No viable manual alternative exists

1. **In which case we can get the most benefit of automation?**
2. Repetitive tests that run for multiple builds
3. Tests that tend to cause human error.
4. Tests that are impossible to perform manually.
5. **All of the above**
6. **What kind of test which you think should not be automated?**
7. Tests that are seldom executed.
8. **Exploratory testing**
9. **Usability testing**
10. Test which is executed quickly when done manually.
11. **What is the difference between Explicit and Implicit wait?**

Implicit waits are used to provide a default waiting time between each consecutive test step/command across the entire test script. Implicit wait is set for the entire duration of the webdriver and is set at the start of the program.

Explicit waits are used to halt the execution till the time a particular condition is met or the maximum time has elapsed. Explicit wait works similar to Implicit Wait, but unlike Implicit wait, it works only on the particular element, on which it is set, rather than on all elements in your code.

1. **What is the difference between PUT and PATCH requests?**

PUT is a method of modifying resource where the client sends data that updates the entire resource. It is used to set an entity’s information completely. PUT overwrites the entire entity if it already exists, and creates a new resource if it doesn’t exist.

Unlike PUT, PATCH applies a partial update to the resource.

This means that you are only required to send the data that you want to update, and it won’t affect or change anything else. So if you want to update the first name on a database, you will only be required to send the first parameter; the first name.

1. **Write down how would the XPath of this element look like?**

XPATH --> **//div[@class=’float-left col-3 col-md-12 pr-3 pr-md-0’]**