1. Bug cycle also known as the defect life cycle is the journey of a defect cycle, which a defect goes through during its lifetime.

It starts when defect is found and ends when a defect is closed, after ensuring it’s not reproduced.

**Step for bug cycle:**

* QA Engineer reviews the bug report to check whether the bug is valid or not. If the bug is valid then they send it to developer to fix that bug.
* The developer team fixed that bug.
* Then developer return it to QA Engineer to check the problem is solved or not
* If QA Engineer confirms that the bug is fixed then the bug cycle is completed.
* But QA Engineer confirms the bug is not fixed then it send to developer again to fix the bug.

1. Boundary value analysis checks for the input values near the boundary that have a higher chance of error. Every partition has its maximum and minimum values and these maximum and minimum values are the boundary values of a partition. Developers miss these boundary cases because they follow a happy path when developing and testing. Boundary value analysis helps to discover the errors caused by extreme values. The tester chooses the test data at and immediately above and below the boundaries of the input domain of the data. For example, if an input field expects a string of 10 characters long, the tester tests it with strings of lengths 9, 10, and 11.
2. Agile testing is software testing, which involves the testing of the software from the customer point of view.

**Importance:** This testing doesnot wait for development team to complete the coding first and then doing testing. The coding and testing both goes simultaneously. It require continuous customer interaction**.**

1. Severity means the impact of a bug on the system.Prioritydescribes the importance andorder in which the bug should be fixed.

Low severity and high priority means the bug must be fixed immediately but it does not any harmful affect the software.

**Example:** The spelling mistakes that happens on the cover page or heading or title of an application.

1. During testing, a tester records their findings and other information useful to the developers. All this data belongs to a test record, also called a bug report.

The basic components of the defect report are:

1. Unique id
2. Defect title
3. Defect description
4. Steps to reproduce
5. Environment
6. Screen resolution
7. Module(severity and priority)
8. Screenshots/Screencast
9. Responsible QA
10. **Steps to take screenshot in selenium WeDriver:**
    1. Convert web driver object to TakeScreenshot.

**TakesScreenshot scrShot =((TakesScreenshot)webdriver);**

* 1. Call getScreenshotAs method to create image file.

**File SrcFile=scrShot.getScreenshotAs(OutputType.FILE);**

* 1. Copy file to desired location.

1. **Regression Testing:** In software, regression implies that a feature that used to work suddenly stopped working after a developer added a new code or functionality to the system. Regression testing is always done to verify that new code does not break the existing functionality of the application.

**Confirmation testing:** Confirmation testing is a software test method used by testers to determine whether or not previously reported bugs have been fixed in the system or its elements. This testing method is performed before regression testing. It confirms the functionality and quality of a system.

1. **Steps to arrive at a project estimation:**
   1. Accurately estimate the elements of a project
   2. Provide better forecasts to stakeholders
   3. Create tighter budgets
   4. Plan a project from start to finish
   5. Quickly provide robust numbers to clients
   6. Assign the right people to the right tasks
   7. Ensure that the team have the materials and tools available
2. Exit criteria ensures whether the testing is completed and the application is ready for release. The purpose of exit criteria is to define when a test level is completed.