**Answers:**

**Question #1:**

**Scenarios:**

1. Click on “Work out how much I could borrow” button without filling any details in any fields.
2. Select application type as Single, Number of dependants as 0, Property you would like to buy as “Home to live in” and Your income (before tax) of $10,000, Your other income as $1000, living expenses as $100, Current home loan repayments as $10, Other loan repayments as $10, Other commitments as $10 and Total credit card limits as $50000 and Click on “Work out how much I could borrow” and verify the estimation. 🡪 Happy Path
3. Select application type as Joint, Number of dependants as 0, Property you would like to buy as “Home to live in” and Your income (before tax) of $10,000, Your other income as $1000, 2nd applicant's income (before tax) field as $10, 2nd applicant's other income as $10, living expenses as $100, Current home loan repayments as $10, Other loan repayments as $10, Other commitments as $10 and Total credit card limits as $50000 and Click on “Work out how much I could borrow” and verify the estimation. --🡪 Happy Path
4. Verify valid message is displayed to fill the Required fields when living expenses is left as $0 and all other fields are filled with valid data and Clicked on “Work out how much I could borrow” button.
5. Verify whether all the tool tips are popped up when cursor is moved towards it.
6. Verify whether the tool tips contains the exact message which it should be displayed with respective to the fields
7. Leave Total credit card limits as $0 and fill all other fields with valid data and Click on “Work out how much I could borrow” and verify the estimation
8. Leave Other commitments as $0 and fill all other fields with valid data and Click on “Work out how much I could borrow” and verify the estimation
9. Leave Other loan repayments as $0 and fill all other fields with valid data and Click on “Work out how much I could borrow” and verify the estimation
10. Leave Current home loan repayments as $0 and fill all other fields with valid data and Click on “Work out how much I could borrow” and verify the estimation
11. Leave Your other income as $0 and fill all other fields with valid data and Click on “Work out how much I could borrow” and verify the estimation
12. Leave Your income (before tax) as $0 and fill all other fields with valid data and Click on “Work out how much I could borrow” and verify the estimation
13. Select Property you would like to buy to “Residential Investment” and repeat the scenarios from 2 to 12.
14. Verify whether 2nd applicant's income (before tax) field and 2nd applicant's other income fields are displayed when application type is selected as Joint.
15. Leave 2nd applicant's income (before tax) as $0 and fill all other fields with valid data and Click on “Work out how much I could borrow” and verify the estimation
16. Leave 2nd applicant's other income as $0 and fill all other fields with valid data and Click on “Work out how much I could borrow” and verify the estimation
17. Verify the estimation by increasing/decreasing the values in Current home loan repayments field
18. Verify the estimation by increasing/decreasing the values in all the field.
19. Verify the boundary value scenarios
20. Check all the above scenarios with different no of dependants.

**Question #2:**

1. We can use groups to run specific test cases alone.
2. We can run the script in HTMLUnitDriver browser which is headless and execution will be much faster than all other browsers
3. We can run the test set in parallel execution
4. We can increase the number of thread count in the xml file
5. We can use the same browser instance throughout the execution instead of creating new instance for each test cases.
6. We should use proper explicit waits instead of declaring implicit wait which will delay the execution throughout the script.
7. Reusable methods should be used instead of duplicating, to speed up the test execution.
8. We can use css selector instead of xpath to locate the elements which is faster

**Question #3:**

1. We can use initElements() method which loads the element but it won’t initialize elements. initElements() takes latest address. It initializes during run time when we try to perform any action on an element.
2. We can use explicit wait to avoid throwing exception before the page is fully loaded. Eg : wait.until(ExpectedConditions.visibilityOfElementLocated("element"))
3. We can use JavascriptExecutor interface.
4. We can also use implicit wait immediately after creating the web driver instance.