**Title/Summary:**

Create a software repository that is under version control

**Environment:**

OS: Any

**Pre-condition:**

1. You have an installed OS of your choice ready.
2. You have installed version control tool of your choice. Git is preferred for this exercise.

**Steps:**

1. Create a folder in the location that you intend to be your repository.
2. Initialize the folder to make it a repository.
3. Add a readme file in the repository.
4. Put the added readme file under version control.
5. Commit the added file.
6. Brach the repository so that you have two (2) branches.
7. Switch to the new branch.
8. Modify the readme file that was already checked in.
9. Commit the changes.
10. Switch to the old branch and confirm that the changes made to the other branch don’t reflect in it.
11. Modify the readme file with different changes.
12. Commit the changes.
13. Merge the changes with the other branch.
14. Reconcile the conflicts.
15. Commit the reconciliations.
16. Push the branch(es) to github or similar remote repository.
17. Set security features to control access to the repository.
18. From the remote repository, clone the branch to your local machine, in a separate repository.
19. Repeat steps 8 and 9.
20. Push the changes to remote repository.
21. View the diff through different commits.
22. Reverse the last commit.
23. Commit the changes.
24. Repeat step 20.

**Expected:**

1. Step 1 and 2, repository should be created and put under version control.
2. Steps 3 through 5, readme file should be put under version control and committed.
3. Steps 6 through 12, a new branch should be created and it should be possible to switch between branches and view the differences in commits.
4. Steps 13 through 15, the merge should demand for reconciliation, reconciliation should be done successfully and committed.
5. Steps 16 through 24, the expected results should be similar to 1 though 4.