Module 3: Branching and Merging Git

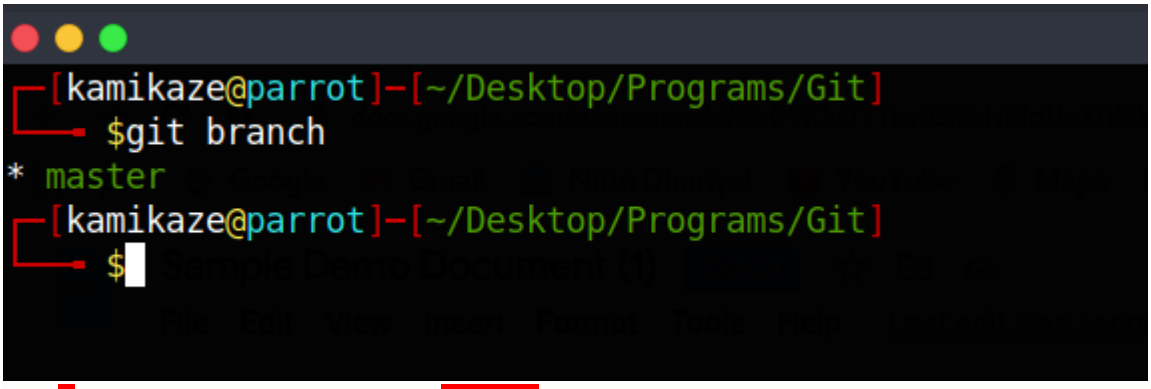
Demo2: Demo on git merge and code conflicts

Problem Statement:
How we perform merging of two branches by git and manage code conflicts.
Solution:

Step 1: In This demo, we will go through GitHub Branch Creation then we merged them with the help of the Git Command Line Interface.

Command Used: git branch

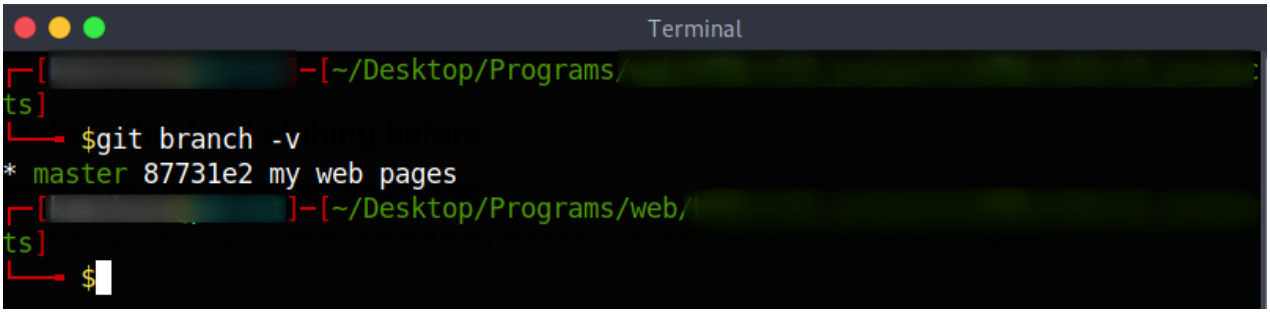
This command will do more than just create and delete branches. You will get a simple listing of your current branches if you run it without any arguments:



The * character here prefixes the master branch: indicates the branch that you currently have checked out (i.e., the branch that HEAD points to). It means that if you commit at this point, the master branch will be moved forward with your new work.

Step 2: Let us the last commit on each branch,

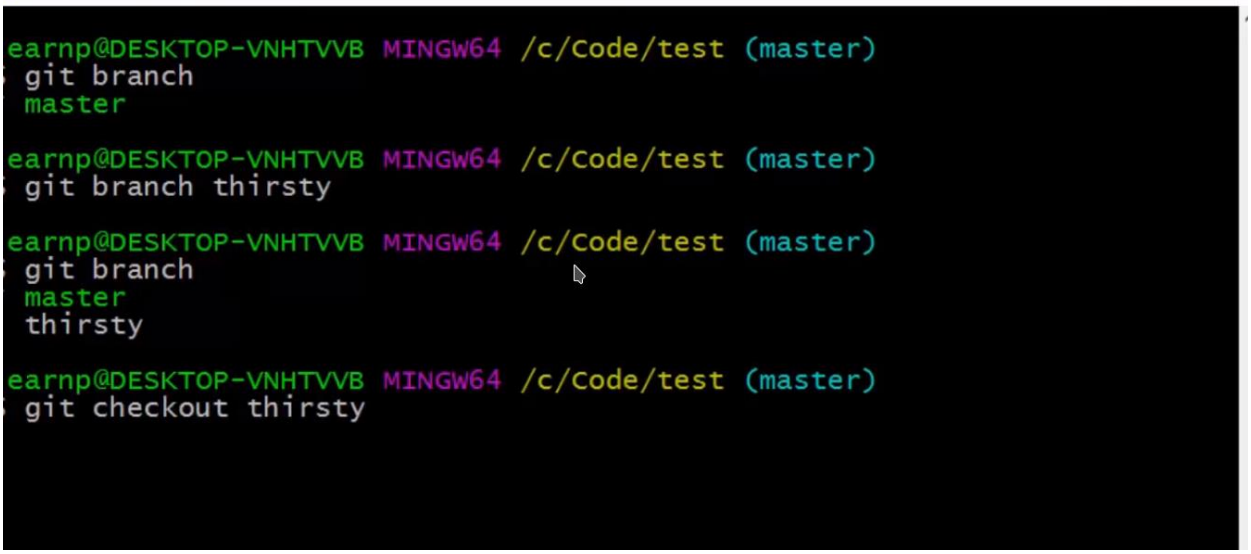
Command Used: git branch -v



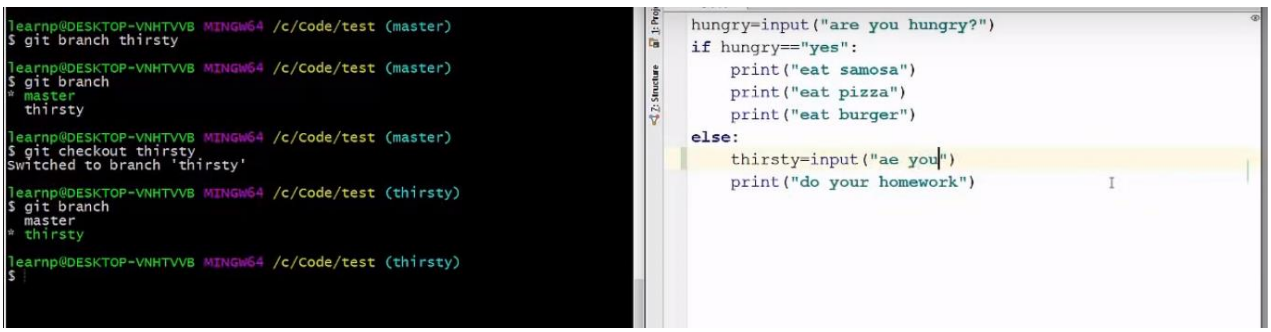
Step 3: Let us Create a new branch,
Command Used: git branch branchname

Step 4: Let us Checkout into our branch.

Command Used: git checkout branchname



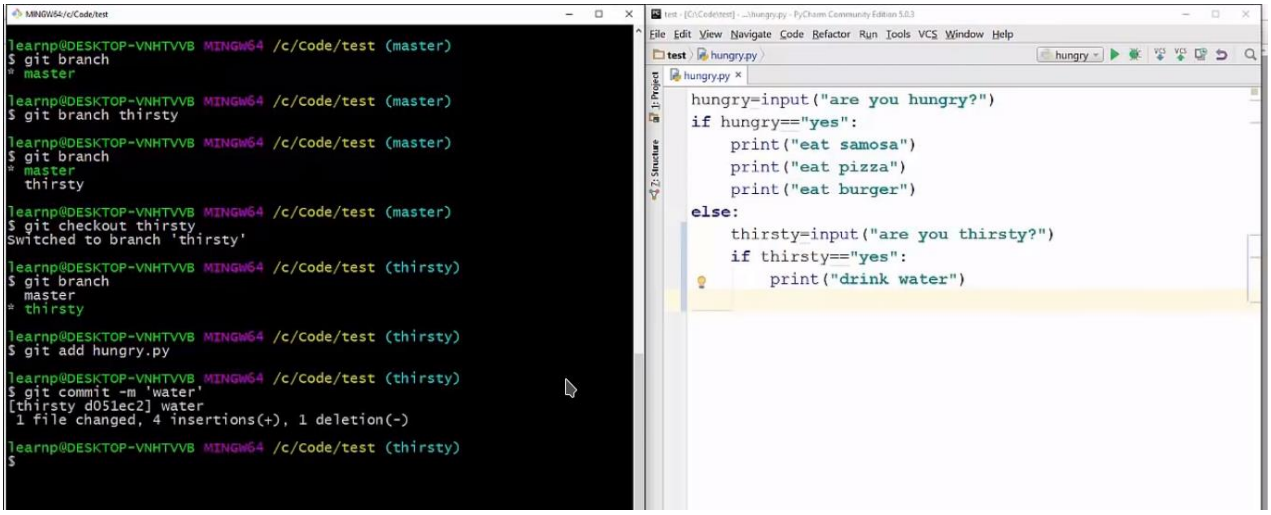
Step 5: Let us create a file in the “thirsty” branch. I created a thirsty.py file, you can create your own file.



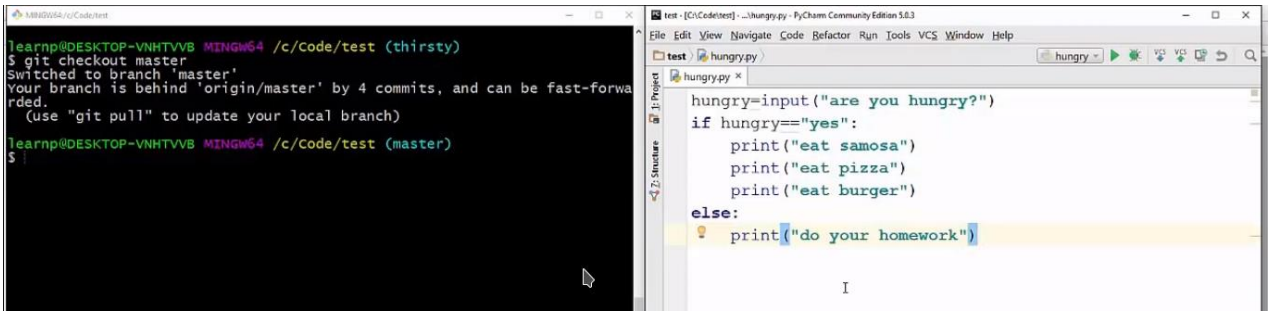
Step 6: Let us add this file into our branch and make a commit for it:

Command Used: git add filename

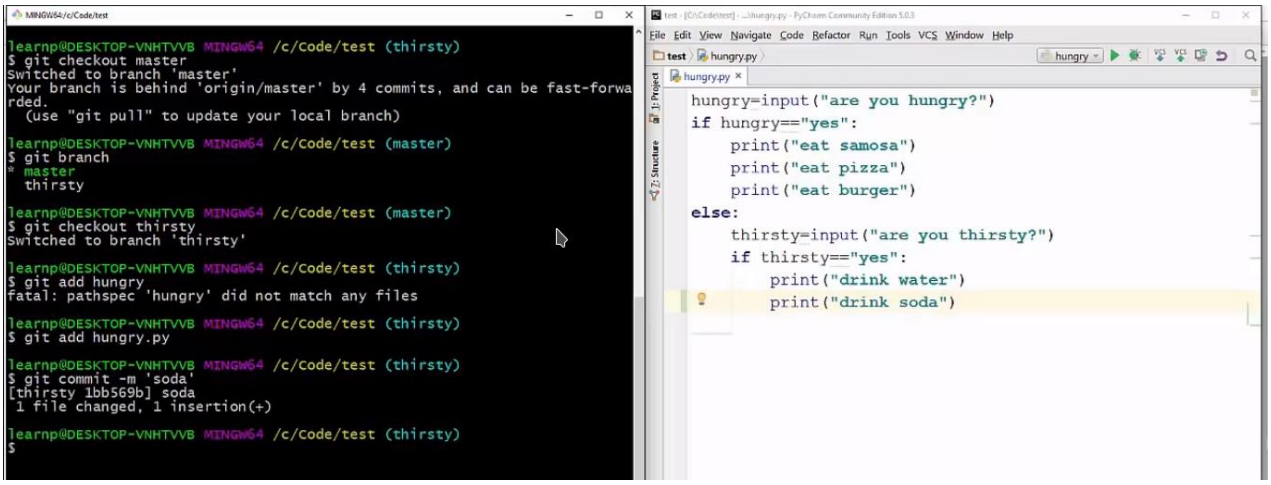
Command Used: git commit -m “your commit”



Step 7: Let us check our master branch, you see the code here got changed because the changes we did are only on the “thirsty” branch.



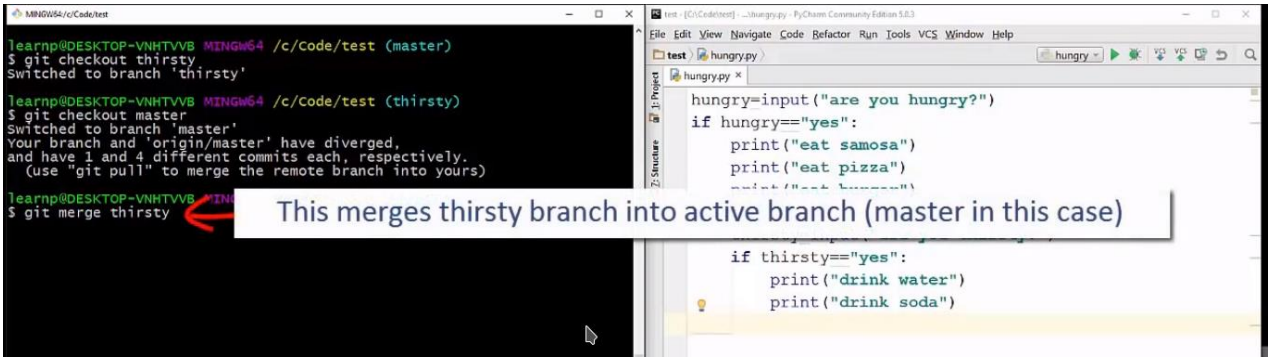
Step 8: Let us make a new branch over here, I make a branch name “hungry”. Let us add a file into it(hungry.py) and make commit into it.



Step 9: Let us merge branch, I am merging the thirsty branch into my master branch for that we use,

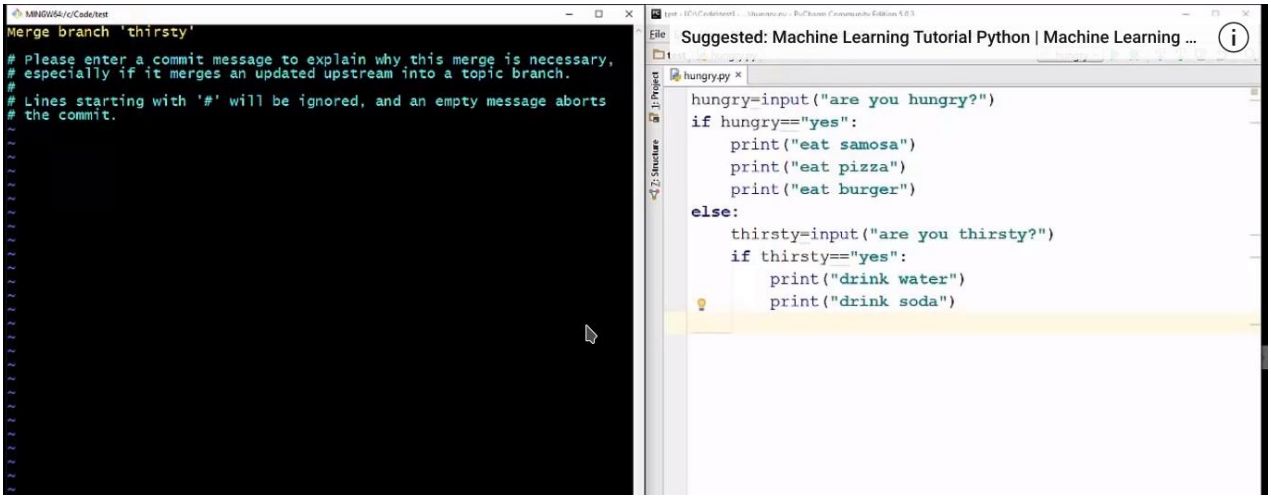
Command Used: git checkout master

Command Used: git merge branchname



Step 10: It will ask you to commit the message. after committing the message, you must use:

Command Used: !wq



Step 11: You can check the log using:

Command: git log

Finally, you can check, you have performed merging into git.