1. Demonstrate use of git commands to push and pull 3 html files from Github account.
   * Create a folder and add 3 blank files
   * Git init
   * Git status
   * Git add .
   * Git status
   * git commit -m "first commit"
   * git remote add origin (add your github repo link here)
   * git push -u origin master
   * git pull -u origin master

1. Demonstrate Building java program (addition of 2 numbers) through Jenkins
2. Open vscode
3. Save the file name as

AdditionOfTwoNumbers.java

1. Create a code-

public class AdditionOfTwoNumbers {

public static void main(String[] args) {

int num1 = 5;

int num2 = 7;

int sum = num1 + num2;

System.out.println("The sum of " + num1 + " and " + num2 + " is: " + sum);

}

}

4.Create another file named run.bat

5. Code for run.bat-

javac AdditionOfTwoNumbers.java

java AdditionOfTwoNumbers.java

Now upload both these files to your github repository(or push them via git bash)

6.Now open Jenkins,and click on New Item

7.Select FreeStyle Project and give it a name

8.In the configurations inside source code management, select git and add your repo link

9.In Build Steps ,click on Add Build Step and select **Execute Windows batch command**

10. insert the code:

call run.bat

11.Save and Apply

12.Click on Build Now

13.Go to Console Output inside the latest build and you will see the output of the java file

3. Demonstrate Continuous Integration process in Jenkins. Build a java program every 2 minutes (addition of two numbers) residing in Github repository.

The same steps as above till Step No.10

11. Scroll up until you find Triggers 12.In Triggers select Build Periodically and put the code \*/2 \* \* \* \*

(This will build the project every 2 min)

13.Save and Apply and Build Now

4. Write a Selenium script to perform automated testing.

**(Make Sure you have installed selenium,if not then run this in cmd: pip install selenium)**

Write this code in vscode :

from selenium import webdriver

from selenium.webdriver.common.keys import Keys

from selenium.webdriver.common.by import By

import time

driver = webdriver.Chrome()

driver.get("http://www.google.com")

search\_box = driver.find\_element(By.NAME, "q")

search\_box.send\_keys("javatpoint")

search\_box.send\_keys(Keys.ENTER)

time.sleep(30)

driver.close()

print("Sample test Successful")

8. Demonstrate use of docker commands to pull ubuntu official image, create a file and push updated image on Dockerhub.

Run these commands in cmd

1. docker pull ubuntu
2. docker run -it --name my-ubuntu ubuntu
3. echo "Hello, Docker!" > example.txt
4. echo "Additional text" >> example.txt
5. exit
6. docker commit my-ubuntu my-ubuntu-modified
7. create a repository in docker website
8. docker tag my-ubuntu-modified (your dockerhub username)/newrepo
9. docker login
10. docker push (your dockerhub username)/newrepo