LAB EXTERNAL DEVOPS

Experiment -1: Source code management on GitHub. Experiment with the source code of Student event registration form

CREATE REGISTRATION.HTML AND REGISTER.CSS FILES IN A FOLDER

- ➔ git clone https://github.com/Adivishnu15/Test.git

Commands To Push into git repo:

- ➔ Create a new git repository first in github copy link
- ➔ Open terminal in files folder start typing below commands

$sudo apt-get update

$sudo apt-get install git (if not there)

$git --version

$ git init

$ git config --global user.name "yourname"

$ git config --global user.email "youremail@example.com"

$ git add registration.html register.css (or) git add .

$ git commit -m "Initial commit - student registration"

$ git remote add origin https://github.com/yourusername/repo.git

$ git branch -M main

$ git push -u origin main (if asked for login password create a token in github)

Jenkins start : commands

->open localhost:8080 first if Jenkins not come try these

- sudo systemctl start Jenkins
- sudo systemctl enable Jenkins
- sudo systemctl status Jenkins
- open localhost:8080

Experiment 2: Calculate sum and average of first ten numbers using Java in Jenkins.

code from -> git clone https://github.com/Adivishnu15/Jenkins.git

- ➔ Open Jenkins -> new item -> select freestyle -> give name -> ok
- ➔ Give any description -> select git -> copy paste the url -> branch main
- ➔ Build steps -> execute shell -> type these commands
- javac SumAvg.java
- java SumAvg
- ➔ Click on save ->click on (1)->build now -> wait for green mark ->console output

Experiment 3. Perform arithmetic operations on two integers using Java in Jenkins

Code from -> git clone https://github.com/Adivishnu15/Jenkins.git

- ➔ Open Jenkins -> new item -> select freestyle -> give name -> ok
- ➔ Give any description -> checkbox parameterized -> add parameters ->string parameter->(name: a , default :10 name:b ,default :11)
- ➔ select git -> copy paste the url -> branch main -> execute shell commands

```
javac Arithmetic.java
java Arithmetic $a $b
```

- ➔ save->build with parameters -> change values-> build now ->console output

Experiment 4. .Display student details (Name, Rollno, Dept.) using Java in Jenkins

Code from -> git clone https://github.com/Adivishnu15/Jenkins.git

- ➔ Open Jenkins -> new item -> select freestyle -> give name -> ok
- ➔ Give any description -> checkbox parameterized -> add parameters ->string parameter->(name: name , default :adi name:rollno ,default :303, name:Dept ,default : cse)
- ➔ select git -> copy paste the url -> branch main -> execute shell commands

```
javac StudentDetails.java
java StudentDetails "$name" "$roll" "$dept"
```

- ➔ save->build with parameters -> change values-> build now ->console output

Experiment 13.Write a simple program in JavaScript and perform testing using Selenium.

Code from-> git clone https://github.com/Adivishnu15/Selenium.git

In folder 13 code will be there

➔ create new directory/folder and save the file as .js
➔ open terminal here commands

- sudo apt update
- sudo apt install nodejs npm –y
- npm init –y
- npm install selenium-webdriver

➔ (if chrome is not there try to install)

- google-chrome –version (check version exist or no, if not install below commands)
- wget https://dl.google.com/linux/direct/google-chrome-stable_current_amd64.deb
- sudo apt install ./google-chrome-stable_current_amd64.deb -y
-
- sudo apt install chromium-chromedriver –y

➔ For installation of higher version of node :

curl -o- https://raw.githubusercontent.com/nvm-sh/nvm/v0.39.3/install.sh | bash
source ~/.bashrc
nvm list-remote
nvm install v16.14.0

➔ **To run**

- node filename.js

Experiment 14.Write a program to perform Login form testing using Selenium

Code from-> git clone https://github.com/Adivishnu15/Selenium.git

In folder 14 code will be there

➔ create new directory/folder and save the file as .js and .html files
➔ open terminal here commands

- sudo apt update
- sudo apt install nodejs npm –y
- npm init –y
- npm install selenium-webdriver
- node test_login.js (run command/node filename.js)

Experiment 15: Write a program to perform Testing on results.mvsrec.edu.in using Selenium.

Code from-> git clone https://github.com/Adivishnu15/Selenium.git

In folder 15 code will be there

- ➔ create new directory/folder and save the file as .js
- ➔ open terminal here commands
- sudo apt update
- sudo apt install nodejs npm –y
- npm init –y
- npm install selenium-webdriver
- node result.js (run command/node filename.js)