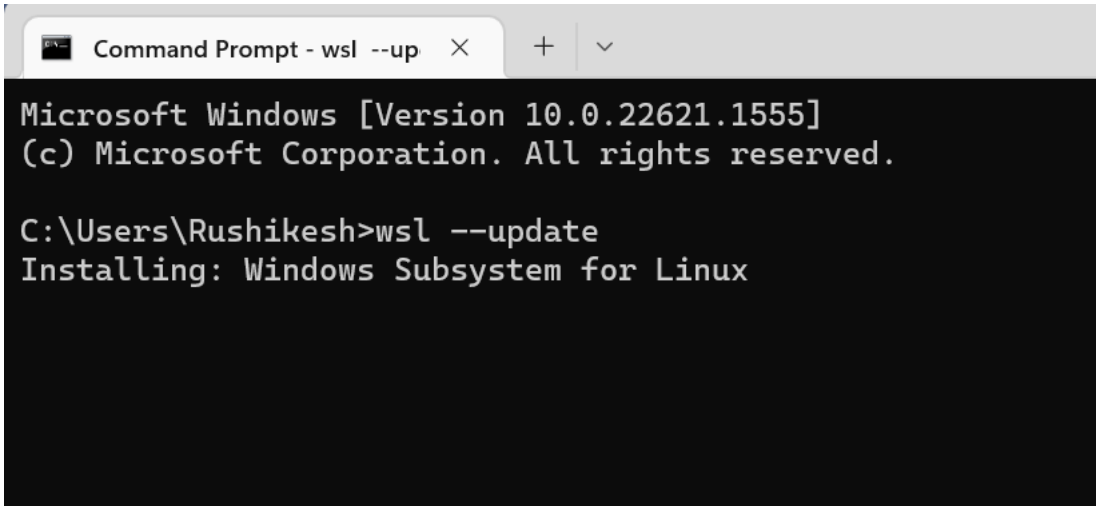
Devops 8

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

1) Docker Installation from chrome

2)



If above command doesn't work

To be sure of getting updates to the WSL2 kernel:

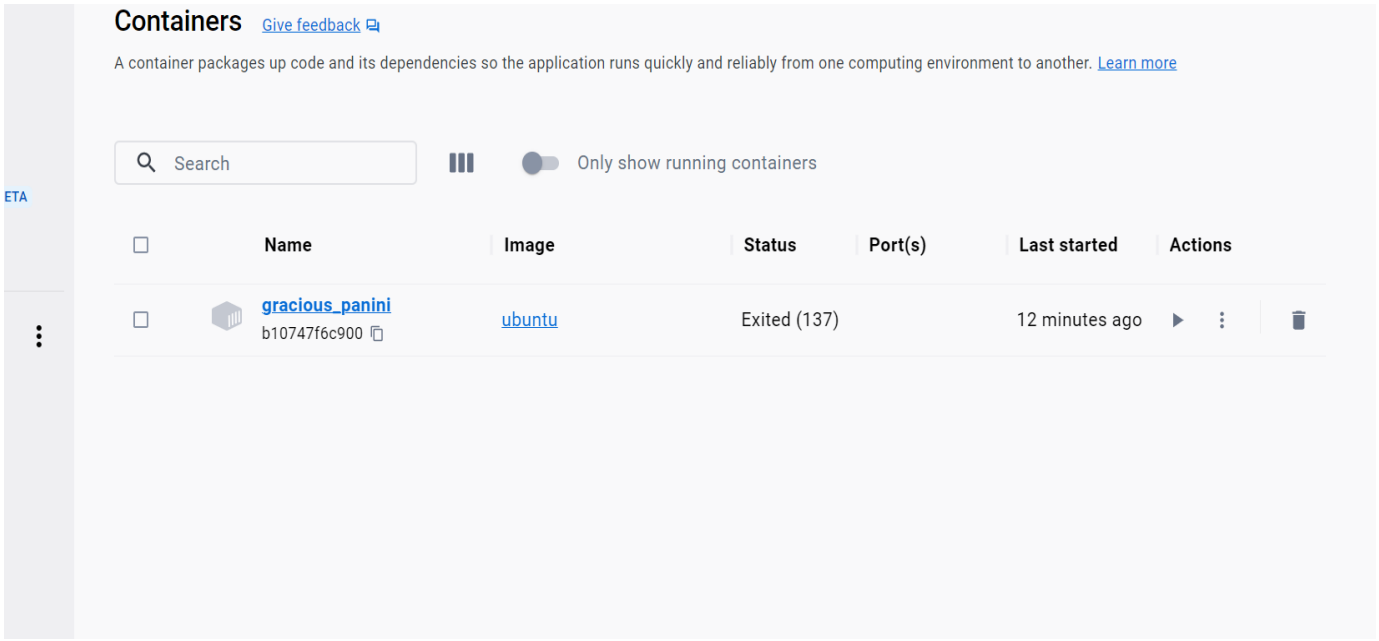
1. Open Settings > Update & recovery > Windows Update.
2. Click on "Advanced options"
3. Enable "Receive updates for other Microsoft products when you update Windows"
4. Returning to the previous page in Settings, click "Check for updates".

3)

```
C:\Users\Rushikesh>docker login
Authenticating with existing credentials...
Login Succeeded

Logging in with your password grants your terminal complete access to your account.
For better security, log in with a limited-privilege personal access token. Learn more at https://docs.docker.com/go/acc
ess-tokens/

C:\Users\Rushikesh>docker run -it -d ubuntu
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
2ab09b027e7f: Pull complete
Digest: sha256:67211c14fa74f070d27cc59d69a7fa9aeff8e28ea118ef3babc295a0428a6d21
Status: Downloaded newer image for ubuntu:latest
b10747f6c90052c5325ec30c78165d98f63ed445522ddbbc12fc7455be185edc

C:\Users\Rushikesh>docker pull ubuntu
Using default tag: latest
latest: Pulling from library/ubuntu
Digest: sha256:67211c14fa74f070d27cc59d69a7fa9aeff8e28ea118ef3babc295a0428a6d21
Status: Image is up to date for ubuntu:latest
docker.io/library/ubuntu:latest
```

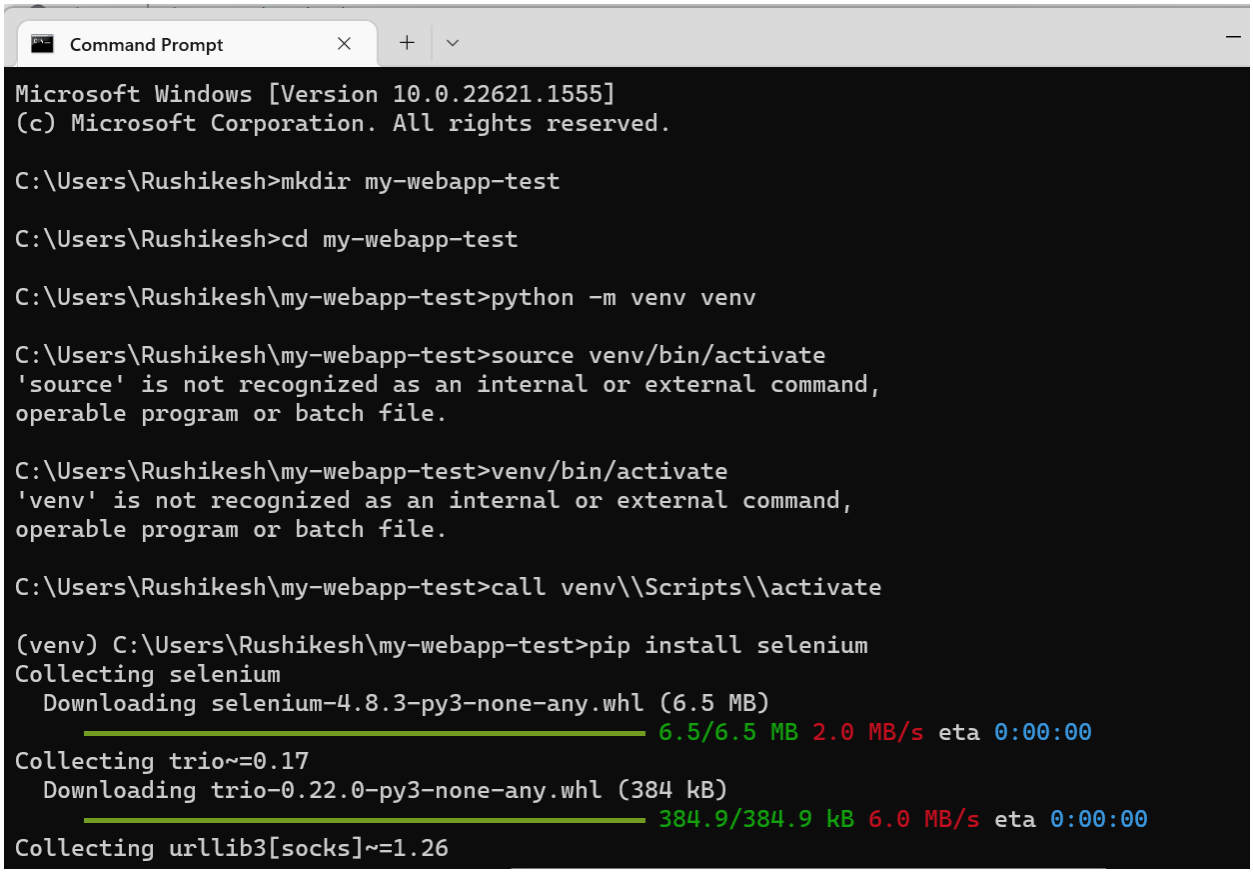
```
C:\Users\Rushikesh>docker images
REPOSITORY   TAG       IMAGE ID       CREATED       SIZE
ubuntu       latest    08d22c0ceb15   6 weeks ago   77.8MB

C:\Users\Rushikesh>docker tag 08d22c0ceb15
"docker tag" requires exactly 2 arguments.
See 'docker tag --help'.

Usage:  docker tag SOURCE_IMAGE[:TAG] TARGET_IMAGE[:TAG]

Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE

C:\Users\Rushikesh>docker tag 08d22c0ceb15 Rushikeshs187/ubuntu
Error parsing reference: "Rushikeshs187/ubuntu" is not a valid repository/tag: invalid reference format: repository name
 must be lowercase

C:\Users\Rushikesh>docker tag 08d22c0ceb15 rushikeshs187/ubuntu

C:\Users\Rushikesh>docker images
REPOSITORY             TAG       IMAGE ID       CREATED       SIZE
ubuntu                 latest    08d22c0ceb15   6 weeks ago   77.8MB
rushikeshs187/ubuntu   latest    08d22c0ceb15   6 weeks ago   77.8MB

C:\Users\Rushikesh>
```

```
C:\Users\Rushikesh>docker push rushikeshs187/ubuntu:latest
The push refers to repository [docker.io/rushikeshs187/ubuntu]
b93c1bd012ab: Mounted from library/ubuntu
latest: digest: sha256:5523f822d85895b0a75236aba20ff6bf4135721b031fceee7a5c4a74a700c1e6 size: 529

C:\Users\Rushikesh>docker ps
CONTAINER ID   IMAGE     COMMAND       CREATED         STATUS         PORTS     NAMES
b10747f6c900   ubuntu    "/bin/bash"   6 minutes ago   Up 6 minutes             gracious_panini

C:\Users\Rushikesh>docker stop b10747f6c900
b10747f6c900

C:\Users\Rushikesh>
```

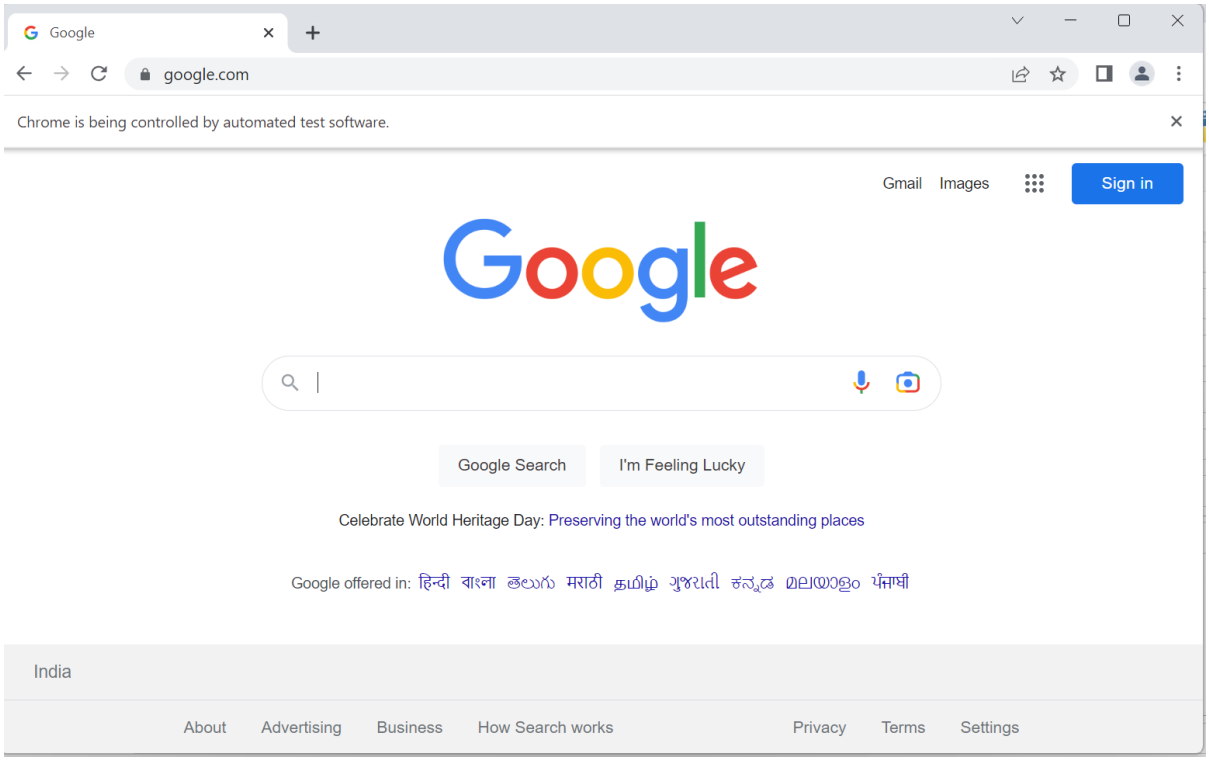

Containers
Give feedback
A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another. Learn more
Search
Only show running containers
ETA
Name
Image
Status
Port(s)
Last started
Actions
gracious_panini
b10747f6c900
ubuntu
Exited (137)
12 minutes ago

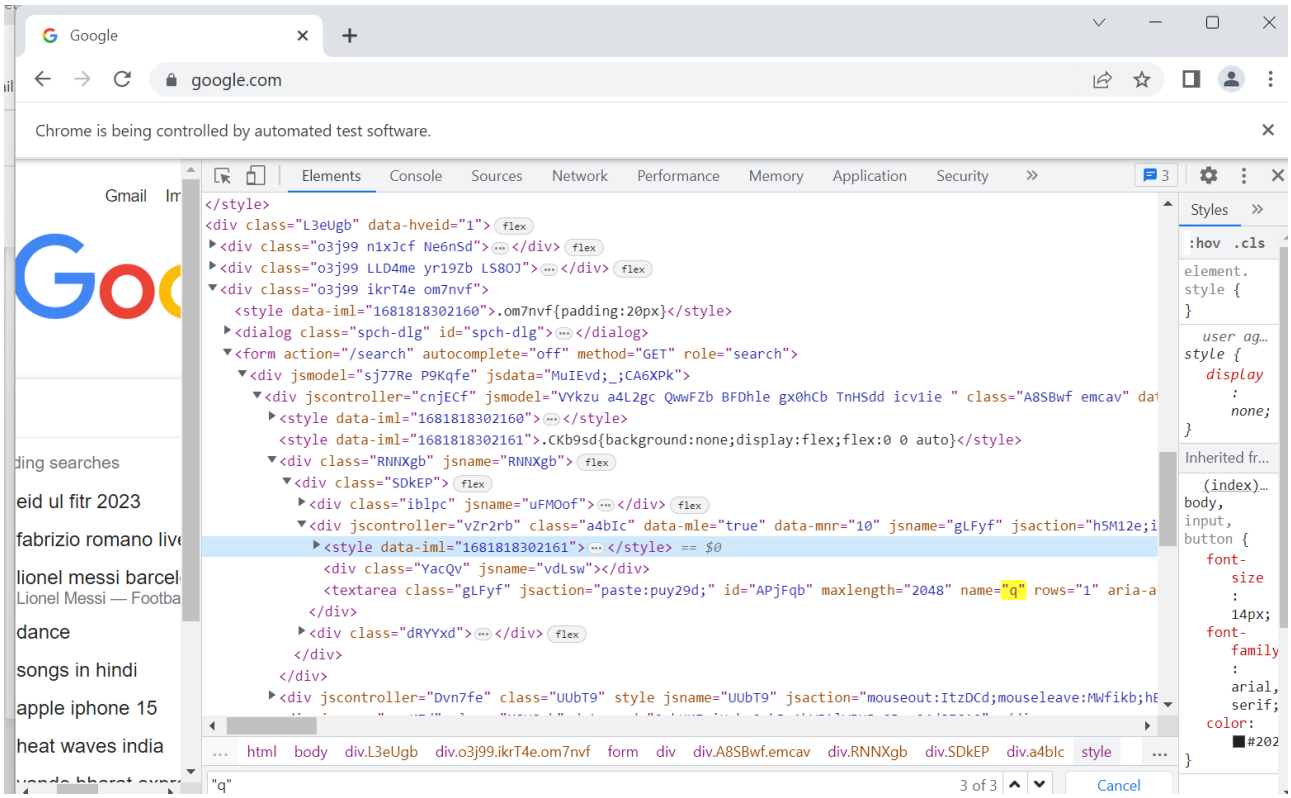
Devops – 6

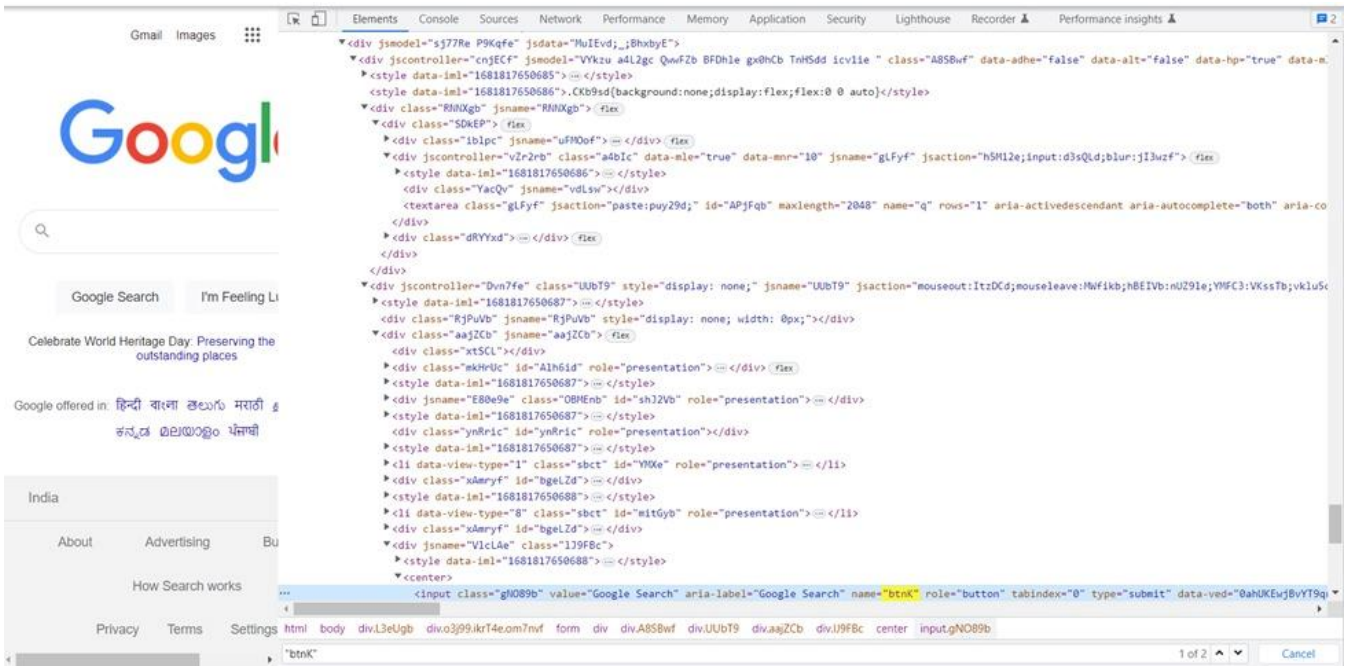
6. Write a Selenium script to perform automated testing.




```
In [41]: from selenium import webdriver

In [42]: from selenium.webdriver.common.by import By

In [43]: from selenium.webdriver.common.keys import Keys

In [44]: import time

In [45]: driver = webdriver.Chrome()

In [50]: driver.get("https://www.google.com/")

In [51]: driver.close()
```


Google
google.com
Chrome is being controlled by automated test software.
Gmail
Images
Sign in
Google
Google Search
I'm Feeling Lucky
Celebrate World Heritage Day: Preserving the world's most outstanding places
Google offered in: हिन्दी বাংলা తెలుగు मराठी தமிழ் ગુજરાતી ಕನ್ನಡ മലയാളം ਪੰਜਾਬੀ
India
About
Advertising
Business
How Search works
Privacy
Terms
Settings


Google
google.com
Chrome is being controlled by automated test software.
Elements
Console
Sources
Network
Performance
Memory
Application
Security
Styles
Gmail
eid ul fitr 2023
fabrizio romano liv
lionel messi barcel
Lionel Messi — Footba
dance
songs in hindi
apple iphone 15
heat waves india
"q"
3 of 3
Cancel


Gmail
Images
Google Search
I'm Feeling Li
Celebrate World Heritage Day: Preserving the outstanding places
Google offered in: हिन्दी বাংলা తెలుగు मराठी
ಕನ್ನಡ മലയാളം ਪੰਜਾਬੀ
India
About
Advertising
How Search works
Privacy
Terms
Settings
Elements
Console
Sources
Network
Performance
Memory
Application
Security
Lighthouse
Recorder
Performance insights
<input class="gNO89b" value="Google Search" aria-label="Google Search" name="btnK" role="button" tabindex="0" type="submit" data-ved="0ahUKEwjBvYT9q
html body div.L3eUgb div.o3j99.ikrT4e.om7nvf form div div.A8SBwf div.UUbT9 div.aajZCb div.lJ9FBc center input.gNO89b
"btnK"
1 of 2
Cancel

Devops – 7-Create an image of php project and push on Dockerhub repository

index.php file (If html code throws errors try in notepad)

index.php

```
<html>
    <?php echo "Hello World from a PHP container"?>
</html>
```

Dockerfile:

create a file called Dockerfile (without any extension) and write the below code into the file. Now with Docker file let construct an image.

Dockerfile > ...

```
FROM php
COPY ./index.php ./
EXPOSE 3000
CMD ["php", "-S", "0.0.0.0:3000"]
```

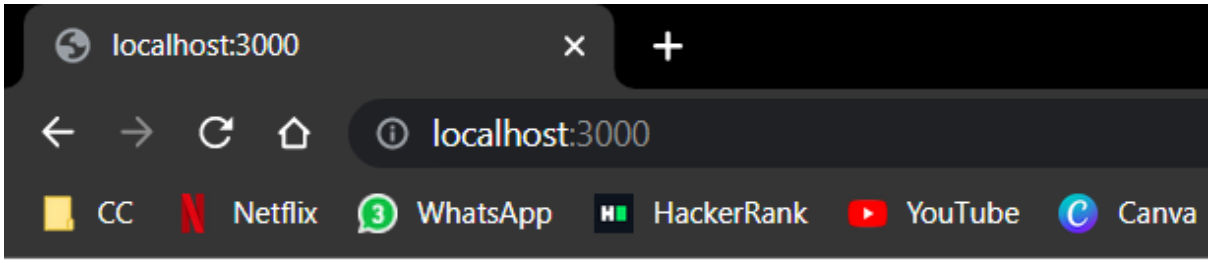
docker build:

docker build .-t rushikeshs187/php

```
PS C:\Users\Lisshika Shetty\Desktop\PHP> docker build . -t lisshika/php
[+] Building 74.6s (7/7) FINISHED
 => [internal] load build definition from Dockerfile
```

docker run –name=php -p=3000:3000 rushikeshs187/php

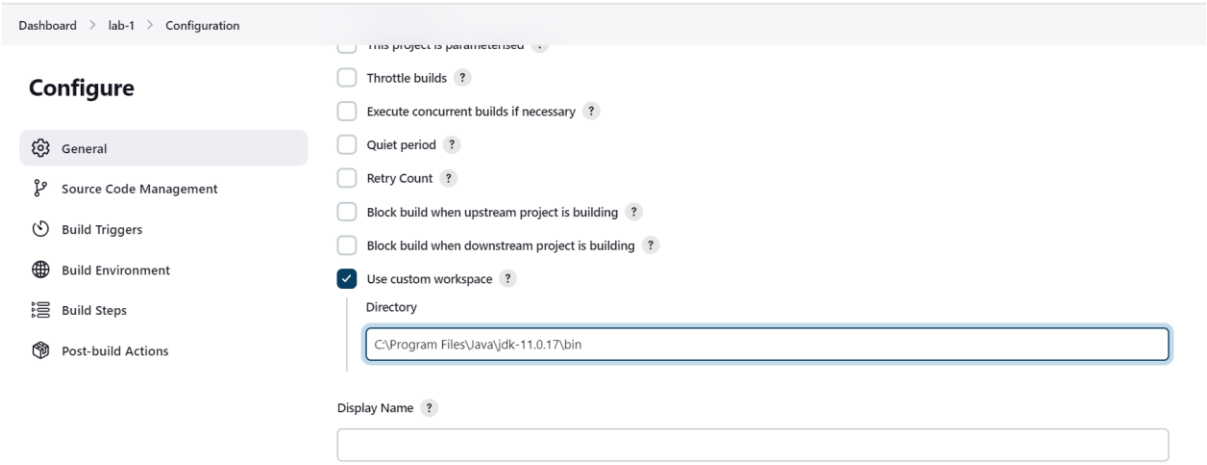
```
PS C:\Users\Lisshika Shetty\Desktop\PHP> docker run --name=php -p=3000:3000 lisshika/php
[Sun Apr 16 09:52:34 2023] PHP 8.2.5 Development Server (http://0.0.0.0:3000) started
```



Hello World from a PHP container

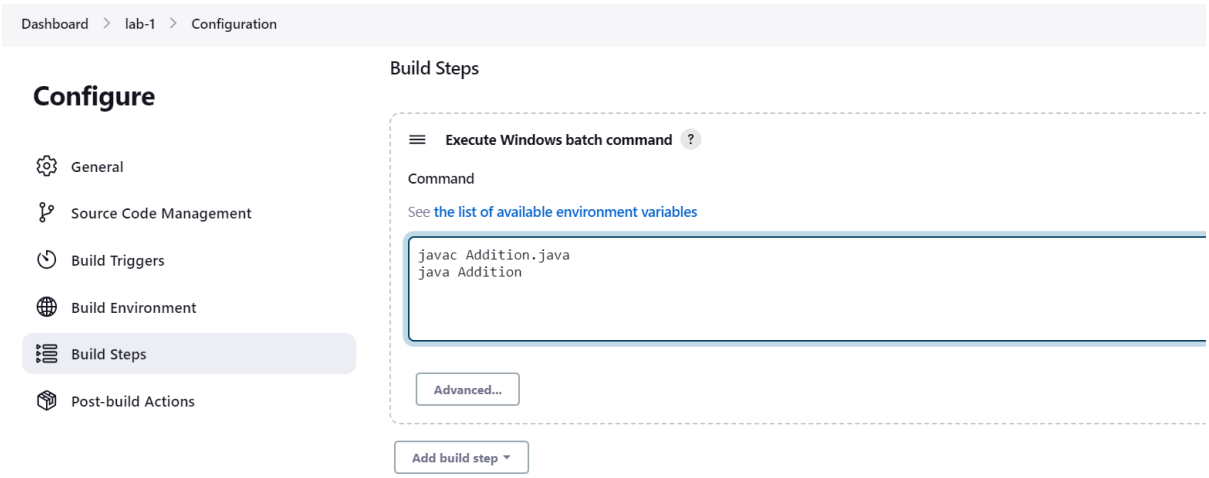
Devops – 2

Demonstrate Building java program (addition of 2 numbers) through Jenkins.



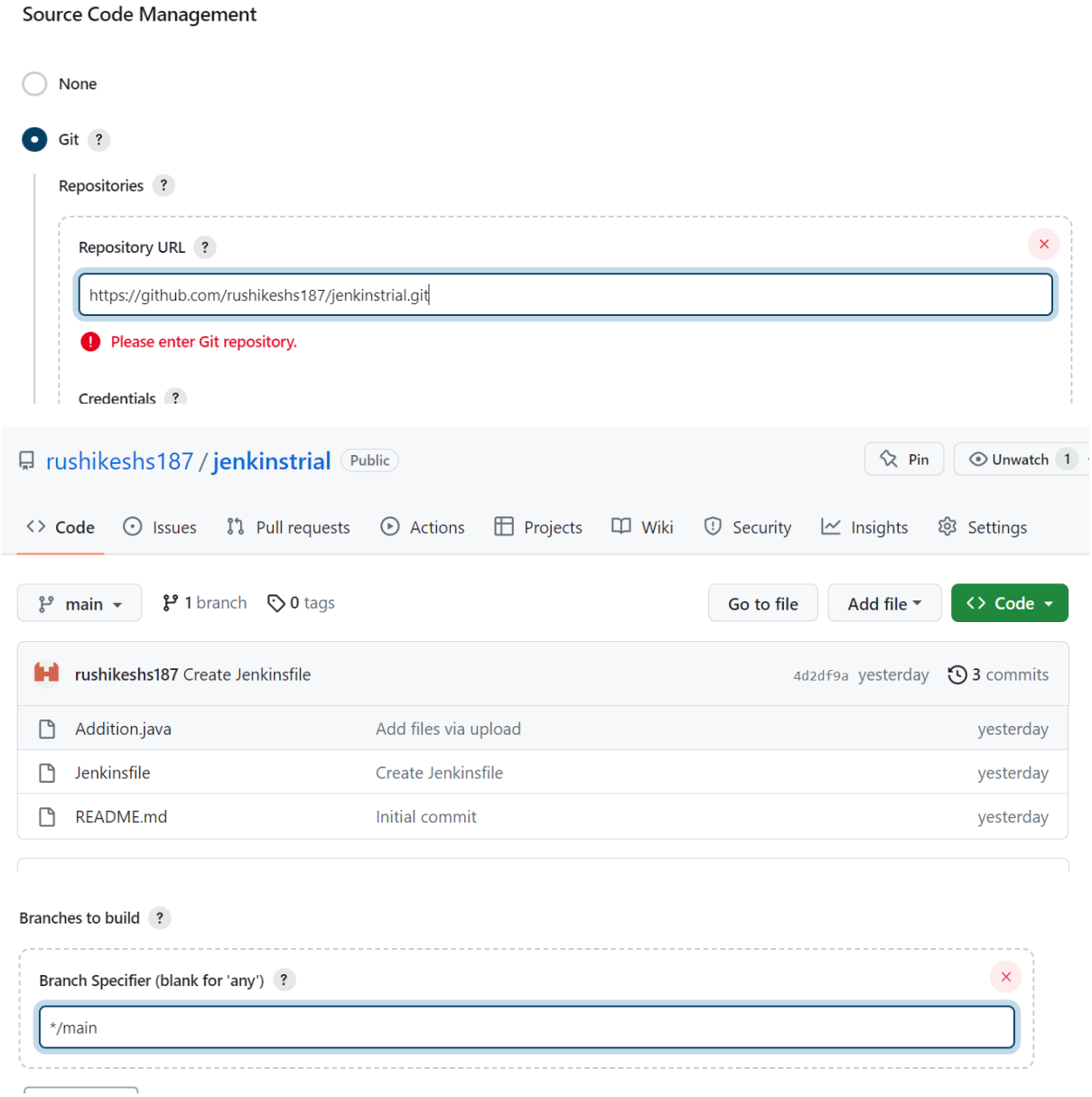

```java
class Main {

  public static void main(String[] args) {

    int first = 10;
    int second = 20;

    // add two numbers
    int sum = first + second;
    System.out.println(first + " + " + second + " = "  + sum);
  }
}
```

Note Class with be the name of the file

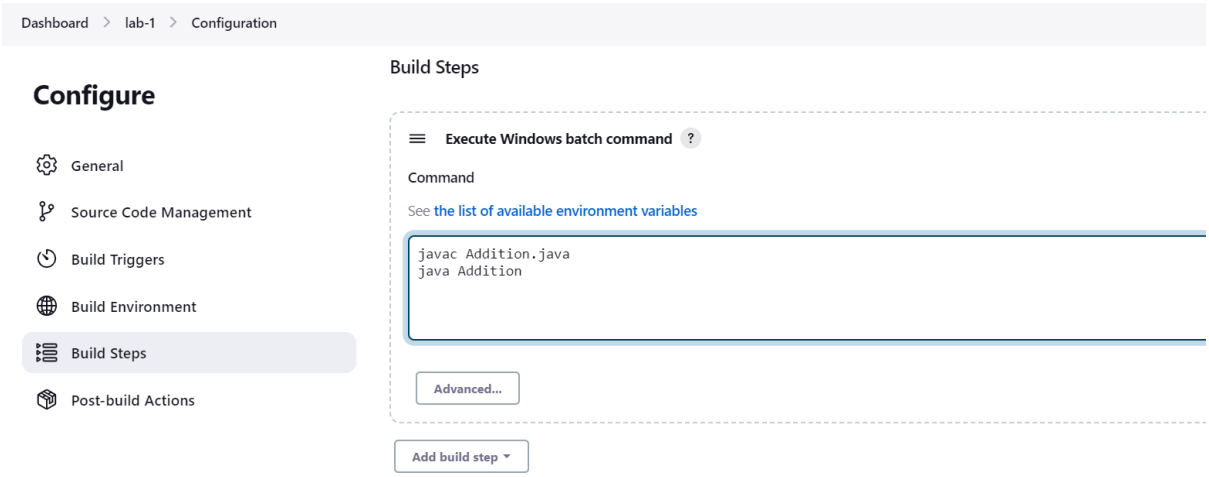


Devops – 3

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



Build Triggers
Trigger builds remotely (e.g., from scripts)
Build after other projects are built
Build periodically
Schedule
*/2 * * * *
GitHub hook trigger for GITScm polling
Poll SCM


Dashboard
lab-1
Configuration
Configure
General
Source Code Management
Build Triggers
Build Environment
Build Steps
Post-build Actions
Build Steps
Execute Windows batch command
Command
See the list of available environment variables
javac Addition.java
java Addition
Advanced...
Add build step

Devops – 1

git config --global user.name "w3schools-test" **// put your username in quotes**
git config --global user.email "test@w3schools.com" **// put your email in quotes**

mkdir myproject
cd myproject

git init

<Create html and css files in myproject folder>

ls

git status

git add --all

git status

git commit -m "First release of Hello World!"

git remote add origin <github repo link> **// put the github repo link**

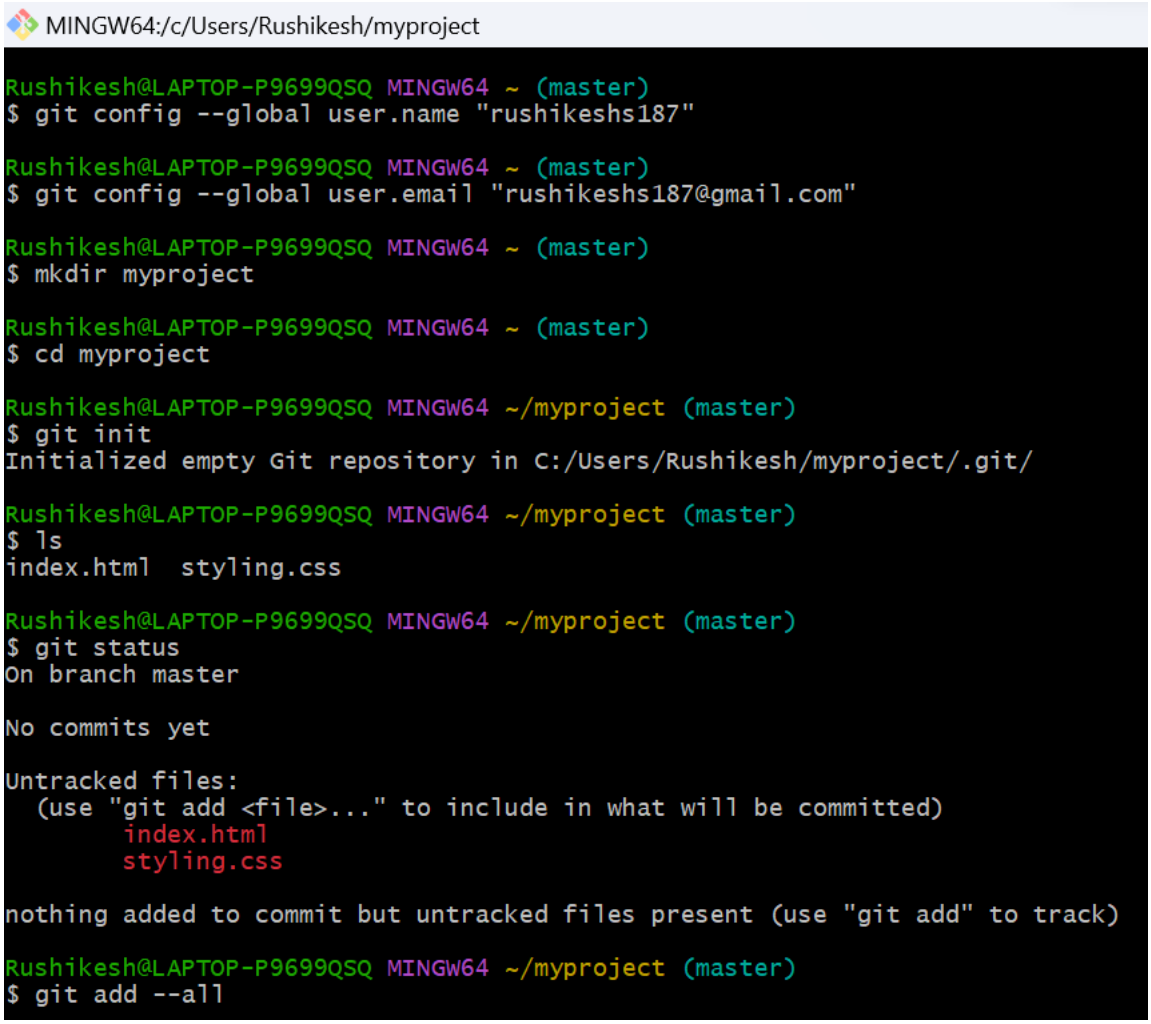
git push --set-upstream origin master

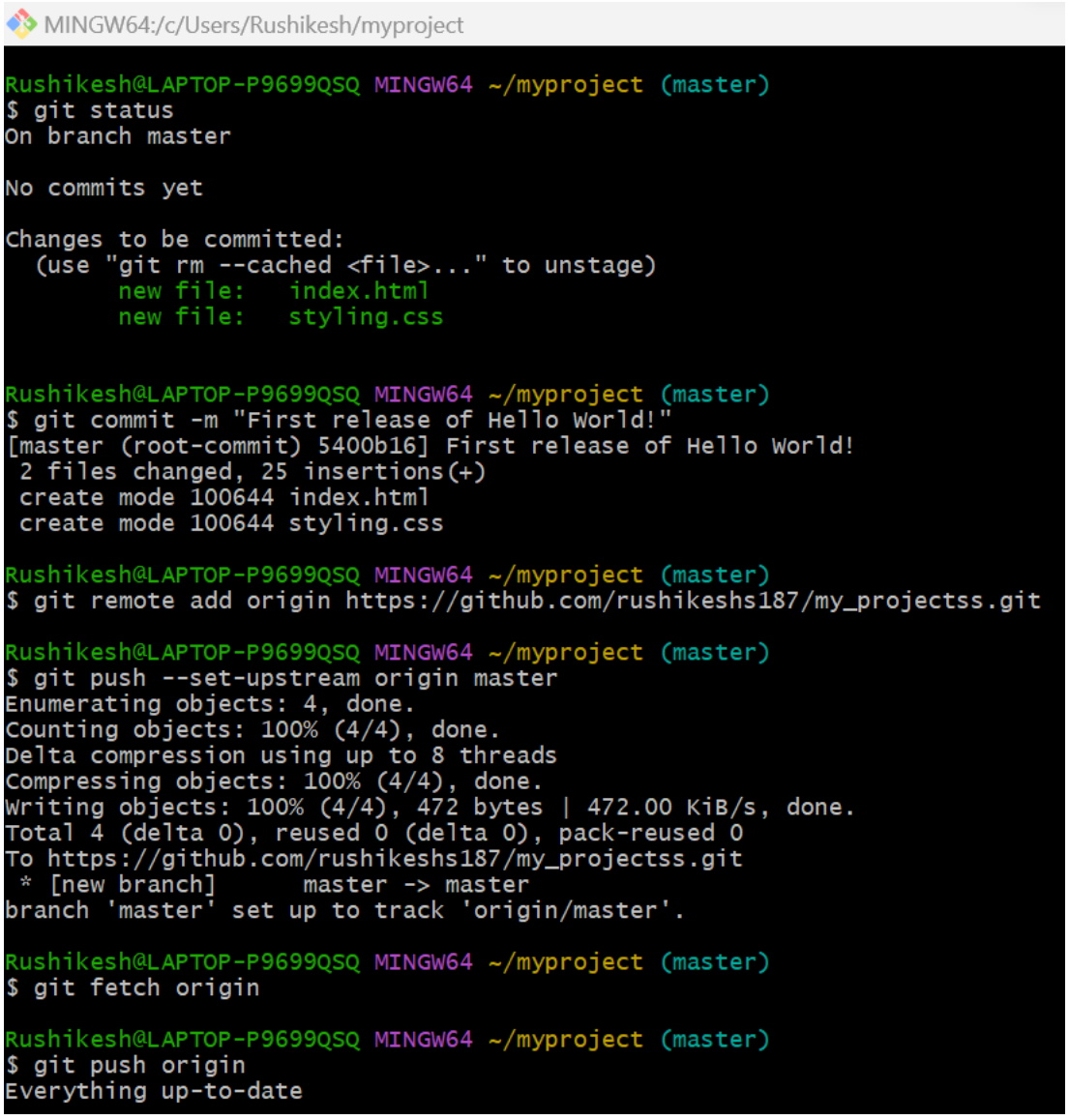
git fetch origin

git push origin

change something

git pull origin


MINGW64:/c/Users/Rushikesh/myproject
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~ (master)
$ git config --global user.name "rushikeshs187"
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~ (master)
$ git config --global user.email "rushikeshs187@gmail.com"
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~ (master)
$ mkdir myproject
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~ (master)
$ cd myproject
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~/myproject (master)
$ git init
Initialized empty Git repository in C:/Users/Rushikesh/myproject/.git/
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~/myproject (master)
$ ls
index.html styling.css
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~/myproject (master)
$ git status
On branch master
No commits yet
Untracked files:
(use "git add <file>..." to include in what will be committed)
index.html
styling.css
nothing added to commit but untracked files present (use "git add" to track)
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~/myproject (master)
$ git add --all


MINGW64:/c/Users/Rushikesh/myproject
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~/myproject (master)
$ git status
On branch master
No commits yet
Changes to be committed:
(use "git rm --cached <file>..." to unstage)
new file: index.html
new file: styling.css
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~/myproject (master)
$ git commit -m "First release of Hello World!"
[master (root-commit) 5400b16] First release of Hello World!
2 files changed, 25 insertions(+)
create mode 100644 index.html
create mode 100644 styling.css
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~/myproject (master)
$ git remote add origin https://github.com/rushikeshs187/my_projectss.git
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~/myproject (master)
$ git push --set-upstream origin master
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 472 bytes | 472.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/rushikeshs187/my_projectss.git
* [new branch] master -> master
branch 'master' set up to track 'origin/master'.
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~/myproject (master)
$ git fetch origin
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~/myproject (master)
$ git push origin
Everything up-to-date

Rushikesh@LAPTOP-P9699QSQ MINGW64 ~/myproject (master)
$ git pull origin
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 705 bytes | 30.00 KiB/s, done.
From https://github.com/rushikeshs187/my_projectss
5400b16..c4876a5 master -> origin/master
Updating 5400b16..c4876a5
Fast-forward
index.html | 4 ++--
1 file changed, 2 insertions(+), 2 deletions(-)
Rushikesh@LAPTOP-P9699QSQ MINGW64 ~/myproject (master)
$