

DevOps Assignment

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1. Launch an EC2 instance and login via ssh furthermore, install httpd(apache)

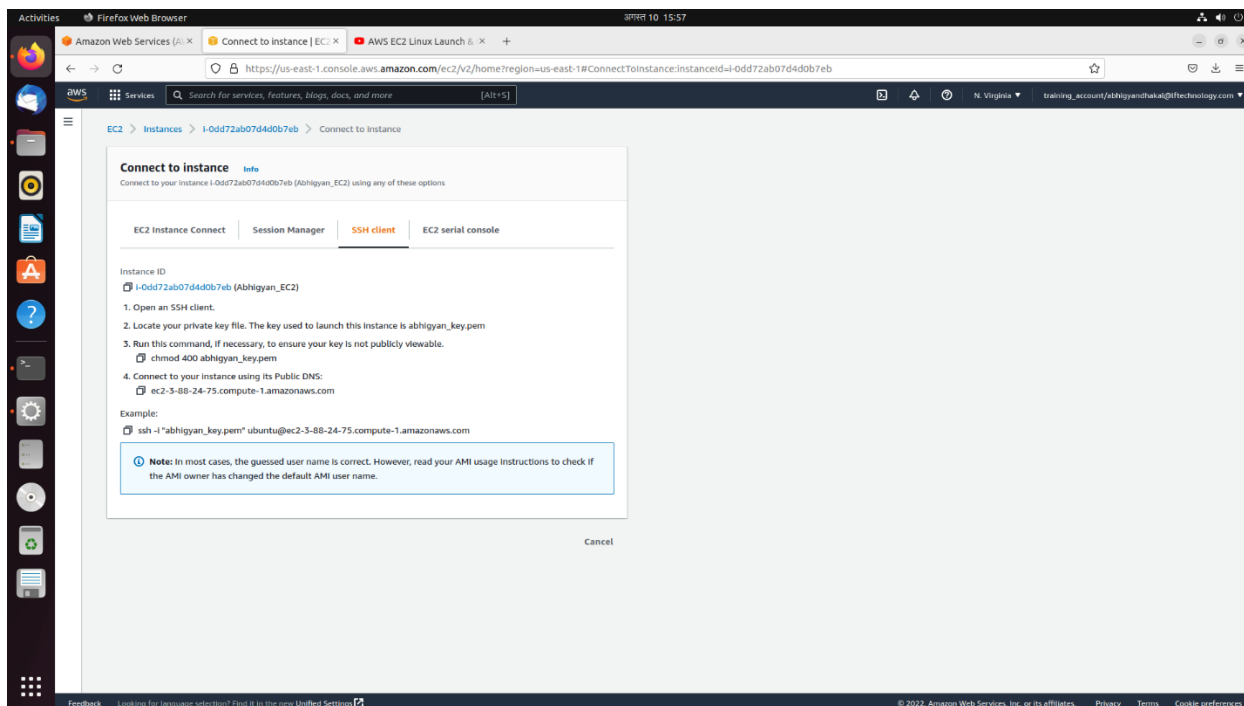


Figure 1: Creating an EC2 instance

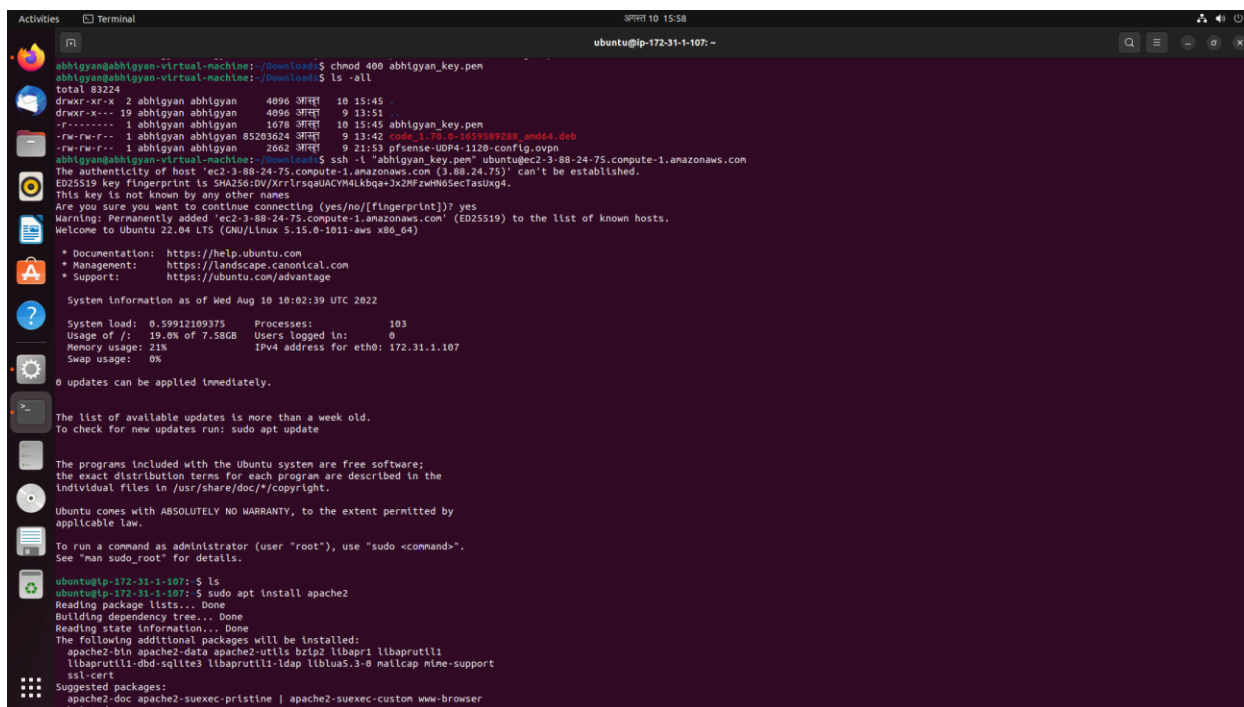
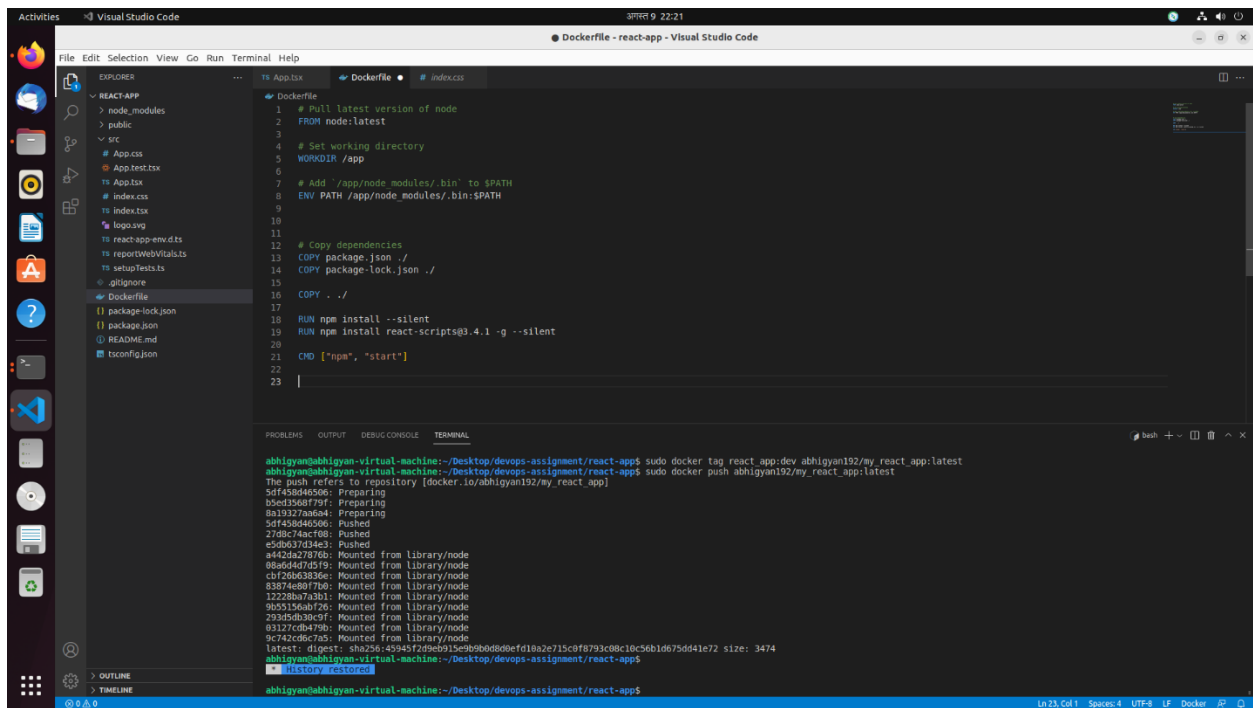


Figure 2: Connecting to the created EC2 instance



2. Create a Dockerfile for node js and react and push the created docker images to the docker hub repository.



The screenshot shows the Visual Studio Code interface with a Dockerfile open in the editor. The Dockerfile contains the following instructions:

```
1 # Pull latest version of node
2 FROM node:latest
3
4 # Set working directory
5 WORKDIR /app
6
7 # Add /app/node_modules/.bin to $PATH
8 ENV PATH /app/node_modules/.bin:$PATH
9
10 # Copy dependencies
11 COPY package.json ./
12 COPY package-lock.json ./
13 COPY . ./
14
15 RUN npm install --silent
16 RUN npm install react-scripts@3.4.1 -g --silent
17
18 CMD ["npm", "start"]
```

The terminal at the bottom shows the command to build and push the image:

```
abhiyan@abhiyan-virtual-machine:~/Desktop/devops-assignment/react-app$ sudo docker tag react_app:dev abhiyan192/my_react_app:latest
abhiyan@abhiyan-virtual-machine:~/Desktop/devops-assignment/react-app$ sudo docker push abhiyan192/my_react_app:latest
The push refers to repository [docker.io/abhiyan192/my_react_app]
5ff45846598e: Preparing
5ff45846598e: Pushed
8a19127a6a64: Preparing
8a19127a6a64: Pushed
27d8c74ac708: Pushed
e5d637d34e3: Pushed
e442d427d76b: Mounted from library/node
88a6d4d7d519: Mounted from library/node
cb726b63336e: Mounted from library/node
83874e8d77e1: Mounted from library/node
12228ba7a3b1: Mounted from library/node
9b55156abf2e: Mounted from library/node
292d5db3ac9f: Mounted from library/node
63127cd6479b: Mounted from library/node
9c742c06c7a5: Mounted from library/node
latest: digest: sha256:43943f27b0931be098d8d0efdaa2e715c0f8793c08c1c56b1d675d641e72 size: 3474
abhiyan@abhiyan-virtual-machine:~/Desktop/devops-assignment/react-app$
```

Figure 5: Creating docker file in a react/node project and pushing it to docker hub

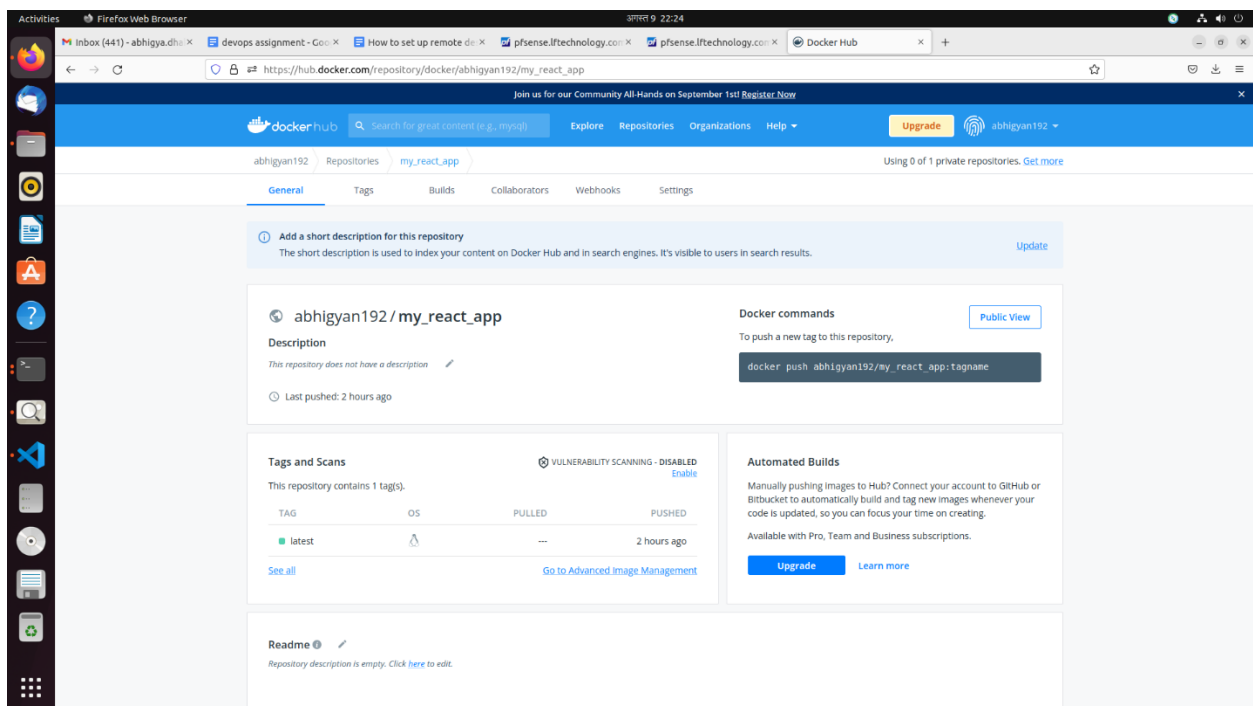


Figure 6: Docker hub repository after pushing the created image file

3. Setup office vpn and access self-learning platforms.

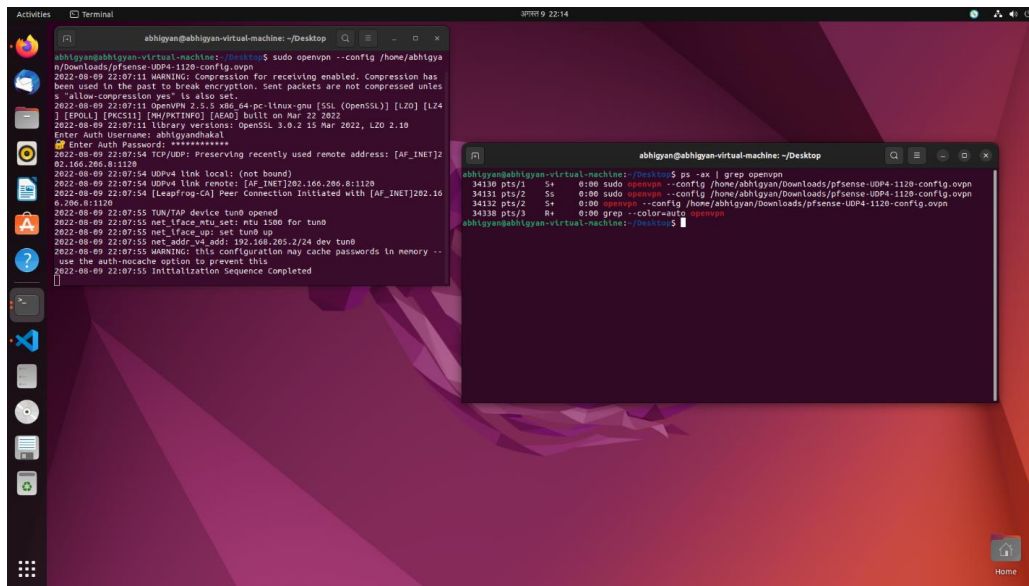


Figure 7: Successfully connecting to office VPN using OpenVPN

4. List down common HTTP status code (only 10) with means.

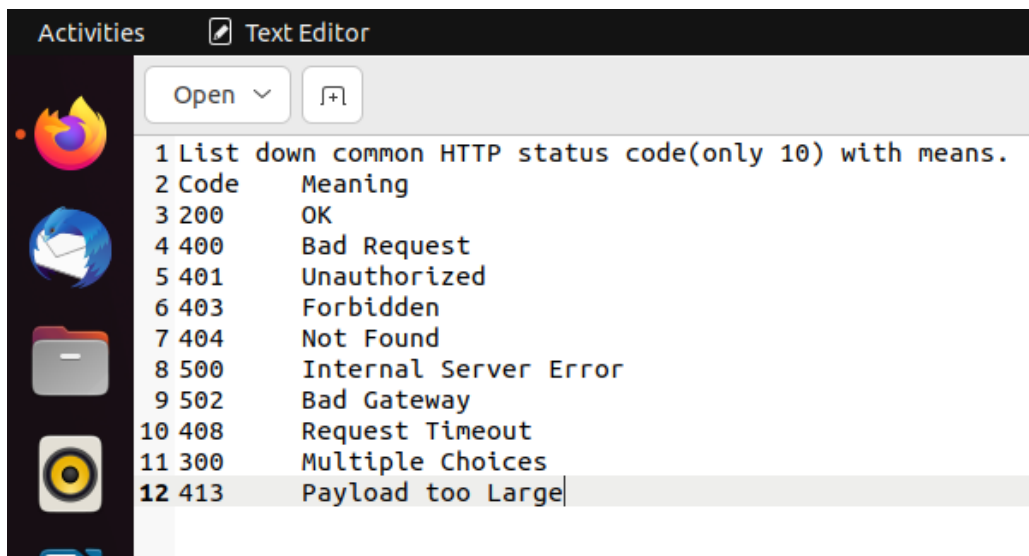


Figure 8: HTTP status codes with its meaning

5. Find network id and Broadcast for 150.10.20.30.

