

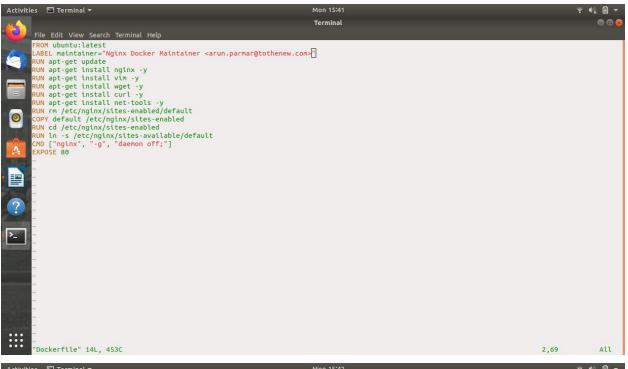
Assessment -14 DOCKER

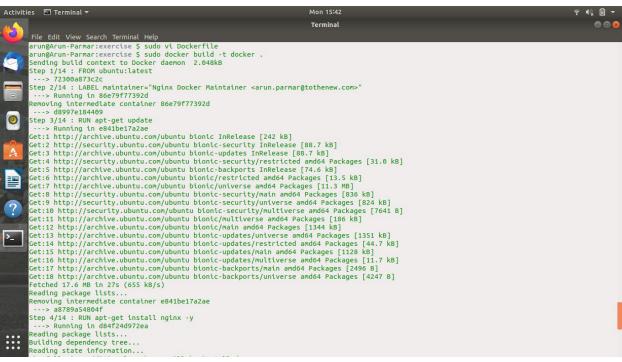
Trainee Name: Arun Parmar

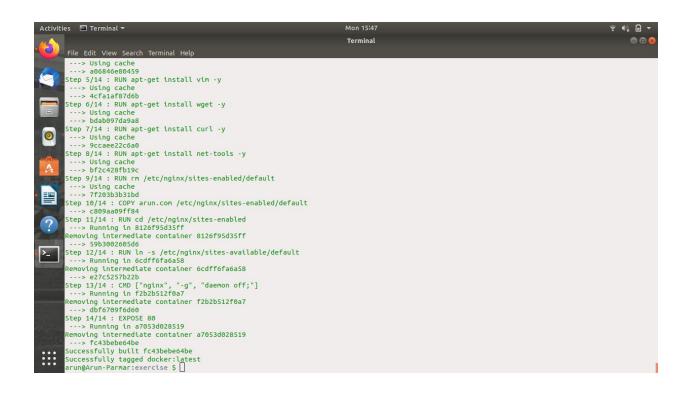
Mentor Name: Ravi Kumar

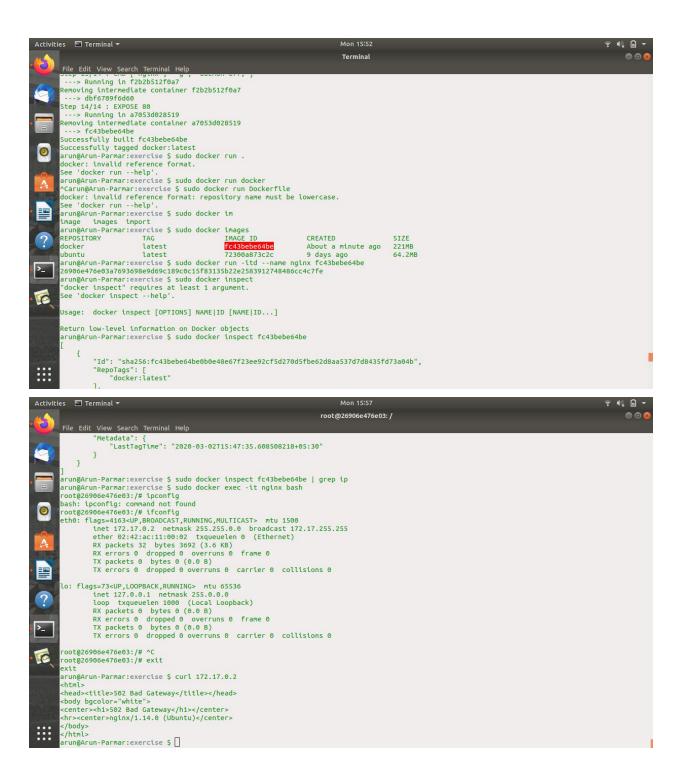
College: UPES

- 1. Set the base image to Ubuntu
- Add File Author / Maintainer
- Install Nginx
- Install necessary tools: vim wget curl net-tools
- Remove the default Nginx configuration file
- Copy a configuration file from the current directory
- Expose ports (80)
- Set the default command to execute Nginx when creating a new container









2. What is the difference between 'RUN', 'CMD', & 'ENTRYPOINT' in dockerfile?

RUN executes the command(s) that you give in a new layer and creates a new image. This is mainly used for installing a new package.

CMD is the default command to be run by the entrypoint. It sets default command and/or parameters, however, we can overwrite those commands or pass in and bypass the default parameters from the command line when docker runs

ENTRYPOINT is the program to run the given command. It is used when yo want to run a container as an executable.

- 3. How to connect docker client to docker daemon running on other host?
 - 1. Launch an ubuntu instance
 - 2. ssh into the instance and install docker
 - 3. Create a directory to store the configuration file:sudo mkdir -p /etc/systemd/system/docker.service.d
 - 4.Now create a new file to store daemon options: sudo vim /etc/systemd/system/docker.service.d/options.conf
 - 5. Now paste the following configuration ,save and exit: [Service]

ExecStart=

ExecStart=/usr/bin/dockerd -H unix:// -H tcp://0.0.0.0:2375

- 6. Now reload the docker daemon: sudo systemctl daemon-reload
- 7. Now restart docker: sudo systematl restart docker
- 8. Now open the port 2375 in the security group of the instance and allow the same port in ufw firewall also. Once done execute the following command from the localhost. DOCKER HOST=tcp://(public ip of instance):2375 docker info.

This will list the docker daemon information of the remote instances.

