**Installing Docker on Windows**

* Go to the official Docker website
* Click on Download

**Install Docker**

* Run the downloaded installer (Docker Desktop Installer.exe)
* check the based engine

**Creating an instance in AWS**

* login to the docker
* create two repositories in dockers
* open git bash
* login to the docker
* switch to root user

sudo su

* check the docker version

docker –version

* check all network interfaces

ifconfig -a;

* start the server

service docker start

* change the directory

cd/var/lib/docker

**By using following command pull and run tomcat**

* launch ec2 instance
* connect to the ec2 instance
* sudo su 🡪 switch to root user
* after changing into the root user. change the directory

cd/var/lib/docker

* docker pull tomcat:8.0.52
* docker images(used to **list all Docker images** stored locally on your machine)
* docker tag tomcat:latest koyamadhuri/dev:tom
* docker push koyamadhuri/dev:tom
* docker run -itd –name tomcat-server -p 8080:8080 b4b762737ed4
* docker ps
* removing container

docker rmi 5bcb87a63b50

* get the public ip address from ec2 instance
* access tomcat browser

**By using following commands pull and run mysql**

* launch ec2 instance
* connect to ec2 instance
* sudo su 🡪 switch to root user
* after changing into the root user. change the directory

cd/var/lib/docker

* docker pull mysql
* docker image(used to **list all Docker images** stored locally on your machine)
* docker tag mysql:latest koyamadhuri/qa:mys
* docker push koyamadhuri/qa:mys
* docker run -itd –name mysal -e MYSQL\_ROOT\_PASSWORD=madhuri123 -d mysql
* docker ps
* removing container

docker rmi 8ee5d61c1bf4

**By using following commands pull and run ubuntu**

* launch ec2 instance
* connect to ec2 instance
* sudo su 🡪 switch to root user
* after changing into the root user. change the directory

cd/var/lib/docker

* docker pull ubuntu
* docker image(used to **list all Docker images** stored locally on your machine)
* docker run -it –name my-ubuntu -p 8080:80 a04dc4851cbc
* docker ps
* docker tag ubuntu:koyamadhuri/dev:ubu
* docker push koyamadhuri/dev:ubu
* install

apt update && apt install -y apache2

* service apache2 start
* to get the root user🡪crtl +p, crtl +q
* docker tag ubuntu:koyamadhuri/dev:ubu
* docker push koyamadhuri/dev:ubu
* removing container

docker rmi 1823811022df

* get the public ip address from ec2 instance
* access ubuntu in browser

**By using following commands pull and run httpd**

* launch ec2 instance
* connect ec2 instance

use ssh to connect

* sudo su 🡪 switch to root user
* after changing into the root user. change the directory

cd/var/lib/docker

* docker pull httpd
* docker image(used to **list all Docker images** stored locally on your machine)
* docker tag mysql:koyamadhuri/qa:http
* docker push koyamadhuri/qa:http
* docker run -itd –name httpd -p 40:80 83d938198316
* docker ps
* removing container

docker rmi da3e5f58d967

* get the public ip address from ec2 instance
* access httpd in browser

**By using following commands pull and run nginx**

* launch ec2 instance
* connect to ec2 instance
* sudo su 🡪 switch to root user
* after changing into the root user. change the directory

cd/var/lib/docker

* docker pull nginx
* docker image (used to **list all Docker images** stored locally on your machine)
* docker tag nginx:koyamadhuri/dev:inx
* docker push koyamadhuri/dev:inx
* docker run -itd -name nginx-p 80:80 53a18edff809
* docker ps
* removing container

docker rmi e4bc72a4f0e6

* get the public ip address from ec2 instance
* access nginx in browser