Docker Commands:

1. To check the version of the docker and if it is successfully installed  
   docker –version  
   Ouput:  
   Docker version 24.0.2, build cb74dfc
2. To get the list of all the images  
   docker images
3. To get the list of any running containers  
   docker ps
4. To get the list of all containers running or stopped  
   docker ps -a
5. To pull an image  
   docker pull <imagename>  
   docker pull hello-world
6. To run the image within a container  
   docker run <imagename>  
   docker run hello-world
7. To assign a name to the container  
   docker run –name hello\_c hello-world
8. Foll command downloads ubuntu OS, starts and stop the container  
   docker run --name ubuntu\_c ubuntu:latest
9. Start ubuntu OS in interactive mode  
   docker run -it ubuntu  
   It opens up ubuntu shell. From within the shell execute below commands to download ping utility  
   apt-get update  
   apt-get install iputils-ping  
   ping www.google.com
10. To validate, Open another terminal and execute docker ps. Ubuntu container will be up and running
11. To remover a container. They have to be in stopped state to be able to remove  
    docker rm <container\_name> or <container\_id>
12. To remove images  
    docker rmi <image\_name> or <image\_id>
13. To stop container  
    docker stop <container\_name>
14. Foll command creates a container with the name mongo-db downloading the mongo image  
    docker run -d -p 27017:27017 --name=mongo-db mongo:latest
15. To go inside the mongo shell  
    docker exec -it mongo-db mongosh
16. The above command opens up mongodb interactive shell
17. To start using mongodb database, execute below commands  
    show dbs -> to see the list of databases  
    use Vodafone -> to create a database  
    db.student.insertOne({"name":"shalini","\_id":1})  
    db.student.find()
18. To use existing image on docker hub  
    docker run -p 8080:8080 --name blog1 shalini06mittal/blog
19. To create an image from Dockerfile, follow below steps
    1. Create a folder docker
    2. Create a folder html within docker folder
    3. Create a index.html within html folder
    4. Create a Dockerfile within docker folder
    5. Open integrated terminal from docker folder
    6. Execute below command to create docker image  
       docker build -t html-nginx .
    7. docker run -p 8081:80 --name html html-nginx
20. To create image for java application
    1. docker build -t java\_app .
    2. docker run --name java\_c --env SECRET="Hey There" java\_app  
       OR  
       docker run --name java\_c1 --env SECRET="Hey There" java\_app sleep 300
    3. docker exec -it java\_c1 /bin/bash
21. <https://javatodev.com/docker-compose-for-spring-boot-with-mongodb/>
22. To push image in docker hub  
    docker build -t <username>/imagename .

Where username is the dockerhub id

docker login  
docker push <username>/imagename

AWS

1. https://www.youtube.com/watch?v=R7DQqc3YoKk
2. <https://www.jenkins.io/doc/tutorials/tutorial-for-installing-jenkins-on-AWS/>
3. sudo yum install maven
4. sudo yum install git-core

Once EC2 instance is created and you click Conect