Docker commands

yum install docker -y	**To install docker**
service docker status	**To know docker status**
service docker start	**To start a docker service**
docker images	**To know how many images are there in system**
docker ps	**how many docker containers are running**
docker ps -a	**how many docker containers you are having-all**
docker --help	**to get more info and commands related to docker**
docker pull tomcat	**To Pull docker image from docker hub**

docker run -d --name tomcat-container -p 8081:8080 tomcat:latest

(-d refers detached mode, --name to mention what to name for container, -p refers to give port number. external:internal, image name:tag as tomcat:latest or can give image id

docker run makes images to convert as containers or create new container.

docker run -d_image id	**To convert into container**

chk config to start the docker server in boot time or start server manually by using (start docker.service) command

docker exec -it tomcat-container /bin/bash	**Login to docker container or get inside.**
docker stop tomcat-container	**To stop a container**
docker start_container name	**To start a container**

docker build -t mytomcat .

To build image from docker file and -t refers to give a tag or name of the image then followed by .(dot refers that docker file is in current location or if not specify path of docker file)

docker container prune	**(to delete all stopped containers)**
docker image prune -a	**(to delete all images)**
docker run -itd_Image id	**(it creates the container as well runs it)**
docker ps -aq	**(only gets containers ID)**
docker run -it_image name	**(created a container and inside of container)**
docker rm_container id	**to remove container or delete**
docker rm (container id) -f	**to remove container forcefully with out stopping**

docker rmi (image id) **to remove unused images in container**

docker run -p 8080:8080 -it --rm image name **Port mapping the address**

docker run -p 8080:8080 --rm image name

docker run -d -t --name "myubuntu" ubuntu /bin/bash

docker container ls **to get list of container**

docker image ls **to get list of images**

Create a repository in docker hub website first, if u want to push an image to docker hub

docker login **To login in docker hub in linux server enter username and password**

docker commit_container id_repository name/image-new-name:tag

convert from container to image

docker push_repository name/image-name:tag **(to push docker images to hub give account name)**

Docker File

FROM: for a base image the command must be on top of the docker

RUN: To execute Command, it will create a layer in the image.

MAINTAINER: Author/owner/description

COPY: Copy files from the local system (docker VM) we need to provide a source, destination(We cant download file from the internet and any remote directory)

ADD: Similar to copy but, it provides a feature to download files from the internet, also we extract files at the docker image side.

EXPOSE: To Expose ports such as port 8080 for tomcat, port 80 for Nginx, etc.

WORKDIR: To set a working directory for a container.

CMD: Execute commands but during container creation

ENTRYPOINT: Similar to CMD, but has higher priority over CMD, first commands will be executed by ENTRYPOINT only.

ENV: Environment Variables