Docker:

When you download docker and install docker commands will only run in the root

We need to add the user to the docker group in the root with below command so that we can run docker commands as user also

Usermod –aG docker centos

After adding in root logout and login again

docker images > show you the images exists in the server

Container is the running version of images

docker pull nginx

docker images > the image will be downloaded and

nginx image = base os + nginx is installed on top of base os but we don’t know what is base os

docker is pulled images from docker hub

if the image has badge in docker hub then it is official image

docker pull nginx:alpine

docker pull alpine

after pulling image we need to run the container of the image:

docker create <imageid> /<image-name>

docker create nginx:latest

docker ps > it wil show running containers

docker ps –a > will show all containers status

docker start <container id> >container will start

docker ps

docker stop <container id>

docker rm container id

docker ps –a

docker images

docker rmi image id >will remove images

docker images –a –q

docker rmi ‘docker images –a –q’ >removes all images

docker run nginx >pull+create+run

docker ruun –d > to run container in background

docker ps

docker rm –f container id > it will remove without stopping

docker run –d –p 8080:80 nginx >8080 is host port and attached to nginx port 80 request will go from 8080 and asks port 80 and request will be successful

docker run –d –p 8081:80

docker run –d –p 8082:80

docker ps

docker wil give random name for containers

docker rm –f ‘docker ps -a –q’ >will remove all containers

docker ps

docker run –d -p 8080:80 - -name nginx\_srikanth nginx >it will give a name to the container

containers cannot be duplicated

container is also like a light weigth vm , as it has base os

docker exec –it nginx\_srikanth bash >it will login to the container

cat /etc/\*release > it will show base os and details

exit

even container will have ip address

docker inspect container name > it will show all details relates to container or image

docker image is like docker ami we need to create our own image with docker file but in ami we need to make all configurations and take ami and in docker image base os is already available

we will use same docker image from Dev to Prod

we maintaine images for lower to higher environments by using configurations in kubernetes

if nay port is open we cant use that and map theat post as host port netstat –lntp

docker file:

a declarative way of creating our own images

FROM > as we cannot develop base os we need to give base os