**Basics Docker Commands**

Login into instance & open terminal- $ sudo su

To update our machine-

yum update –y

To install Docker –

yum install docker –y

To check docker installation –

which docker (o/p - /usr/bin/docker)

To check version of docker-

docker –version OR docker –v

To check service status-

Docker info OR service docker status

To start docker service-

Service docker start (o/p- **active and running)**

To See all images present in your local machine

# docker images

To see only running container

# docker ps

(go to hub.docker.com & search for required services in search bar)

To see all containers

# docker ps -a (P- Process & S- Status)

To fine out images in docker-hub

# docker search jenkis/ubuntu/centos

To Download image from dockerhub to local machine

# docker pull jenkis/ubuntu/centos

To run and create service from dockerhub directly- Eg.1

docker run –it ubuntu /bin/bash

To check operating system of container – ( u must be in container)

Cat /etc/os-release (o/p- version, name)

To run and create service from dockerhub directly- Eg.2

docker run –it centos /bin/bash

Cat /etc/os-release (o/p- version, name)

To give name to container

# docker run –it --name irfan ubuntu bin/bash

To start container

# docker start irfan (Container name)

To go inside container

# docker attach irfan

To stop container

# docker stop irfan (Container name)

To delete container

# docker rm irfan

**Dockerfile components & diff command**

Login into AWS account and start ur EC2 instance Access it from putty

Now we have to create container from our own image.

Therefore create one container First

# docker run –it –name irfancontainer ubuntu /bin/bash

# cd tmp/

Now create one file inside tmp directory

# touch myfile

Now if you want to see the difference between the base image & changes on it then

# docker diff irfancontainer

O/P- C /root

A /root/.bash\_history

C /tmp

A /tmp/myfile

Now create image of this container

# docker commit irfancontainer updateimage

# docker images

Now create container from this image

# docker run –it –name newcontainer updateimage /bin/bash

Root @id # ls

# cd tmp

Tmp # ls

o/p – myfile (you will get all files back)

**Image creation from dockerfile :**

Create a file named Dockerfile

Add instructions in dockerfile

Build dockerfile to create imag

Run image to create container

# vi Dockerfile (Add below contain in vi)

FROM ubuntu

RUN echo “I am Dimond” > /tmp/testfile

To create image out of dockerfile

# docker build –t test . (after this command all command will execute which given in vi Dockerfile)

# docker ps –a

# docker images

Now create container from the above image

# docker run –it -- name testcontainer test /bin/bash

# ls

# cd tmp/

# ls (o/p – testfile)

# cat testfile ( o/p - I am Dimond)

# exit

Now more command in Dockerfile :

# vi Dockerfile

FROM ubuntu

RUN echo “I am devops Engineer” > /tmp/testfile

ENV myname irfan

COPY testfile1 /tmp

ADD test.gz /tmp

Esc- :wq

Make some file as per given in dockerfile

# touch testfile1

# ls

# touch test

# ls

# tar –cvf test.tar test

# ls  
# gzip test.tar

# ls

# rm –rf test (test file will delete)

# ls (o/p – test.tar.gz)

# docker build –t newimage .

(o/p- all 6 command in dockerfile will execute successfully)

To make container from this image :

# docker –it –name newcontainer newimage /bin/bash

(o/p we directly run in tmp file: root @ 63fg56g880:/tmp)

# ls

# cat testfile (o/p- I am devops engineer)

# echo $myname – irfan

# exit from container

(To practice more take new code from google and add it in vi dockerfile)