1. Docker Image commands
   1. docker search <image\_name:tag>

// search for images in terminal

* 1. docker pull <image\_name:tag>

// pull images to local machine from docker hub

* 1. docker image ls (or) docker images

// list all downloaded docker images in local system

* 1. docker image inspect <image\_name:tag>

// display detailed information on one or more images

* 1. docker image history <image\_name:tag>

// show the history of an image

* 1. docker image prune

// remove all unused images from local machine

* 1. docker push <image\_name:tag>

// push images to docker hub/registry

* 1. docker image rm <image\_name:tag> (or) docker rmi <image\_name:tag>

// do delete one or multiple docker images

1. Docker container commands
   1. docker ps

// list all running container

* 1. docker ps -a

// list all containers info (running + stopped)

* 1. docker ps -l

// last effected container details

* 1. docker stop <container\_name/id> (or) docker kill <container\_name/id>

// stop running container

* 1. docker rename <container\_name> <new\_name>

// change name of running container

* 1. docker rm <container\_name/id>

// delete container from local machine

* 1. docker inspect <container\_name/id>

// to see detailed info about a container

* 1. docker cp /source/path <container\_name/id>:/destination/path

// copy files from local host to container

* 1. docker container prune

//Remove all stopped containers

1. Running Containers

Syntax : docker run [OPTIONS] <image\_name:tag>

* 1. -it

// launch container with interactive mode

// docker run -itd centos

* 1. -d

// launch containers with detach mode (run in background)

// docker run -d tomcat

* 1. -itd

// launch containers with detach mode

// docker run -itd centos

* 1. --name

// provide name to container when you are launching it

// docker run -itd --name <container\_name> <image\_name:tag>

* 1. -v

// used to attach volumes

* 1. --volumes-from

// for creating and attaching reusables volumes

* 1. --network

// Used for attaching a network to a container

* 1. -p

// Used for port mapping (if you want to go with a specific port for port mapping)

//docker run -d -p <defalut\_port\_of \_app/tool>:<your\_port> <image\_name/id:tag>

// docker run -d -p 8080:80 tomcat

* 1. -P

// Used for port mapping (docker daemon will pick a free port for port mapping, generally docker daemon will pick from 32768 range)

// docker run -d -P tomcat

* 1. -e

// Used for specifying the environment variables of a container

* 1. --cpu

// used to specify the processors that the container should use

1. To enter into a container environment which is running in background
   1. docker exec -it <container\_name/id> bash

// docker exec -it container1 bash

1. Docker Networking
   1. docker network ls

// list all available docker networks

* 1. docker network inspect <network\_name/id>

// shows detailed info about a docker network

* 1. docker network create <network\_name>

// to create docker network with default values

* 1. docker network create --driver <driver\_name> <network\_name>

// to create docker network with specific driver

* 1. docker network create --driver <driver\_name> --subnet <subnet\_range> <network\_name>
  2. // to create docker network with specific driver and subnet range
  3. docker network connect <network\_name/network\_id> <container\_name/id>

// to connect container to specific docker network

* 1. docker network connect <network\_name/network\_id> --ip <ipadd> <container\_name/id>

// to connect container to specific docker network with specific ip

* 1. docker network rm <network\_name/network\_id>

// to delete one or multiple docker networks

* 1. docker network prune

// to delete all unused all docker networks

* 1. docker network disconnect <network\_name/network\_id> <container\_name/id>

// disconnect container from docker network

1. Docker Volumes
   1. docker volume ls

// to list available docker volumes in local machine

* 1. docker volume inspect <volume\_name/id>

// shows detailed info about a docker volume

* 1. docker volume create <volume\_name>

// to create docker volume

* 1. docker volume rm <volume\_name/id>

// to remove one or multiple docker volumes

* 1. docker volume prune

// to delete all unused docker volumes

* 1. -v

// create a docker volume and attach a docker volume to container

// docker run -itd -v /data centos

* 1. --mount

// to attach a docker local volume( which is already created ) to container

// docker run -itd --mount “source=<docker\_local\_volume/path> dest <destination\_dir/path/in/container>” <image\_name/id:tag>