Docker Cheat-Sheet

- sudo usermod -aG docker $USER   : to run command as a non-root user.
- docker version   : shows the installed docker version
- service docker start   : start docker service

Basic info

- ❖ docker ps   : lists only running containers
- ❖ docker ps -a   : shows all containers includes created, running, exited.
- ❖ docker images -a   : lists all images created
- ❖ docker logs   : shows the logs of container
- ❖ docker inspect   : view detail information about a image or a container
- ❖ docker stats   : view resource usage statistics for one or more containers
- ❖ docker port   : list the port mappings for a container
- ❖ docker top   : to view the processes inside a container

Manage images and containers

- ✓ docker build -t [tag name] [directory]   : build a new docker image
- ✓ docker run [image]   : starts a new container from an image
- ✓ docker run --name [container] [image]   : assign a name of container
- ✓ docker run -d [image]   : starts a container in backend
- ✓ docker run -p [Hostport:Containerport] [image]   : map all ports to container
- ✓ docker run -it [image]   : interact with the image through command line
- ✓ docker run -e [my Var=my prop] [image]   : specify an environmental variable for a docker container
- ✓ docker exec -it [container-ID/name] [executable]   : start a shell or entering inside a running container
- ✓ docker rename [old name] [newname]   : rename the container
- ✓ docker save [image] > [archive file] or
- ✓ docker save -o [archive file] [image]   : save an image to a tar archive
- ✓ docker commit [image] [image name]   : save a running docker container as an image
- ✓ docker load -i [archive file]   : load an image to a tar archive
- ✓ docker start [container]   : start the exited container
- ✓ docker stop [container]   : stop the running container
- ✓ docker kill [container]   : forced shutdown of running container
- ✓ docker rm   : delete the exited container
- ✓ docker rm -f   : deleted running container forcefully & dangling containers
- ✓ docker rm $(docker ps -a -q)   : removes all running container
- ✓ docker rmi [image]   : removes a docker image
- ✓ docker rmi $(docker images -q)   : removes all docker images
- ✓ docker system prune   : removes all dangling containers, unused images and containers
- ✓ docker login   : login cli session with registry like Docker hub using credentials
- ✓ docker remote -v   : lists out remote docker host

- ✓ docker push [username/repository: tag]   : upload images to registry
- ✓ docker tag [image] [username/repository: tag]   : set the tag for images pushed to Docker hub
- ✓ docker pull [username/repository: tag]   : download images from registry

Docker-Compose, Volumes & Network

- ➤ docker compose build   : build containers running from a directory of your docker-compose.yml file
- ➤ docker compose up -d   : start multiple containers at once
- ➤ docker compose down   : stop all running containers and also remove them
- ➤ docker compose logs   : shows the logs of running containers with docker compose
- ➤ docker compose -d --scale up [service]=[no. of times]   : scale up the services or containers with limited times as prescribed in Yaml file
- ➤ docker service [service] --replicas [no. of times] [image] : autoscaling services with set number of times
- ➤ docker volume create [volume]   : create a volume in the machine
- ➤ docker run -v [HostDir:TargetDir] -it [container] [image]: connect a container to a volume or mapping local directory with a docker container
- ➤ docker volume rm [volume]   : remove unused volume from machine
- ➤ docker volume ls   : lists all volumes
- ➤ docker volume inspect [volume]   : inspects the volume

Docker Swarm

- o docker swarm init   : enable first node of docker system
- o docker swarm join --token [token] --listen -addr [ip:port] : add a node to a swarm cluster
- o docker swarm join-token   : retrieve the join token
- o docker node ls   : list nodes in a cluster
- o docker node rm [node-name]   : remove a node from swarm cluster
- o docker service ls   : list services in docker swarm
- o docker service ps [service]   : list containers in a service
- o docker service rm [service]   : remove a service