



Docker Commands

IMAGES :

List all Local images

`docker images`

Delete an image

`docker rmi <image_name>`

Remove unused images

`docker image prune`

Build an image from a Dockerfile

`docker build -t <image_name>:<version> .` //version is optional

`docker build -t <image_name>:<version> . -no-cache` //build without cache

CONTAINER :

List all Local containers (running & stopped)

`docker ps -a`

List all running containers

`docker ps`

Create & run a new container

`docker run <image_name>`

//if image not available locally, it'll be downloaded from DockerHub

Run container in background

`docker run -d <image_name>`

Run container with custom name

`docker run - -name <container_name> <image_name>`

**Port Binding in container**

```
docker run -p<host_port>:<container_port> <image_name>
```

Set environment variables in a container

```
docker run -e <var_name>=<var_value> <container_name> (or <container_id>)
```

Start or Stop an existing container

```
docker start|stop <container_name> (or <container_id>)
```

Inspect a running container

```
docker inspect <container_name> (or <container_id>)
```

Delete a container

```
docker rm <container_name> (or <container_id>)
```

TROUBLESHOOT :**Fetch logs of a container**

```
docker logs <container_name> (or <container_id>)
```

Open shell inside running container

```
docker exec -it <container_name> /bin/bash
```

```
docker exec -it <container_name> sh
```

Open shell

-it -d mode m hum running container ke bash / shell ko access kerne kliye ye use kerte ha , for checking file, dependencies, for environment variable

DOCKER HUB :**Pull an image from DockerHub**

```
docker pull <image_name>
```

Publish an image to DockerHub

```
docker push <username>/<image_name>
```



Login into DockerHub

```
docker login -u <image_name>
```

Or

```
docker login
```

//also, docker logout to remove credentials

Search for an image on DockerHub

```
docker search <image_name>
```

VOLUMES :

List all Volumes

```
docker volume ls
```

Create new Named volume

```
docker volume create <volume_name>
```

Delete a Named volume

```
docker volume rm <volume_name>
```

Mount Named volume with running container

```
docker run - -volume <volume_name>:<mount_path>
```

//or using - -mount

```
docker run - -mount type=volume,src=<volume_name>,dest=<mount_path>
```

Mount Anonymous volume with running container

```
docker run - -volume <mount_path>
```

To create a Bind Mount

```
docker run - -volume <host_path>:<container_path>
```

//or using - -mount

```
docker run - -mount type=bind,src=<host_path>,dest=<container_path>
```

Remove unused local volumes

```
docker volume prune //for anonymous volumes
```



NETWORK :

List all networks

`docker network ls`

Create a network

`docker network create <network_name>`

Remove a network

`docker network rm <network_name>`

Remove all unused networks

`docker network prune`