

# Docker Commands Cheat Sheet with Examples

## Basic Docker Commands

`docker --version` - Check Docker version.

Example: `docker --version`

`docker info` - Display system-wide information.

Example: `docker info`

## Container Management

`docker run <image>` - Run a container from an image.

Example: `docker run ubuntu`

`docker run -d <image>` - Run a container in detached mode (in the background).

Example: `docker run -d nginx`

`docker ps` - List running containers.

Example: `docker ps`

`docker ps -a` - List all containers (including stopped).

Example: `docker ps -a`

`docker stop <container_id>` - Stop a running container.

Example: `docker stop 123abc`

`docker start <container_id>` - Start a stopped container.

Example: `docker start 123abc`

`docker restart <container_id>` - Restart a container.

Example: `docker restart 123abc`

`docker rm <container_id>` - Remove a container.

Example: `docker rm 123abc`

`docker logs <container_id>` - View logs of a container.

Example: `docker logs 123abc`

`docker exec -it <container_id> bash` - Access the shell of a running container.

Example: `docker exec -it 123abc bash`

## **Image Management**

`docker images` - List all Docker images.

Example: `docker images`

`docker pull <image>` - Download an image from Docker Hub.

Example: `docker pull mysql`

`docker build -t <image_name> .` - Build a Docker image from a Dockerfile.

Example: `docker build -t my-app .`

`docker rmi <image_id>` - Remove an image.

Example: `docker rmi ubuntu:latest`

`docker tag <image> <new_image_name>` - Tag an image with a new name.

Example: `docker tag ubuntu my-ubuntu:latest`

## **Network & Volumes**

`docker network ls` - List all Docker networks.

Example: `docker network ls`

`docker network create <network_name>` - Create a new network.

Example: `docker network create my-network`

`docker volume ls` - List all Docker volumes.

Example: `docker volume ls`

`docker volume create <volume_name>` - Create a new volume.

Example: `docker volume create my-volume`

## **Docker Compose**

`docker-compose up` - Start services defined in `docker-compose.yml`.

Example: `docker-compose up -d`

`docker-compose down` - Stop and remove containers, networks, and volumes.

Example: `docker-compose down`