

# Docker Command Cheat Sheet

## Basic Docker Commands

- `docker --version` - Check Docker version
- `docker info` - Display system-wide information
- `docker login` - Log in to Docker Hub or registry

## Images

- `docker images` - List all local images
- `docker pull <image>` - Download an image from registry
- `docker build -t <name:tag> .` - Build image from Dockerfile
- `docker rmi <image>` - Remove image
- `docker push <image>` - Push image to registry
- `docker save <image> > file.tar` - Save image to tar file
- `docker load < file.tar` - Load image from tar file

## Containers

- `docker ps` - List running containers
- `docker ps -a` - List all containers (including stopped)
- `docker run <image>` - Create and start container
  - `-d` - Run in detached mode (background)
  - `-p 8080:80` - Map port (host:container)
  - `-v /host/path:/container/path` - Mount volume
  - `--name mycontainer` - Assign a name
  - `-e VAR=value` - Set environment variable
- `docker start <container>` - Start existing container
- `docker stop <container>` - Stop container
- `docker restart <container>` - Restart container
- `docker rm <container>` - Remove container
- `docker logs <container>` - View container logs
- `docker exec -it <container> bash` - Execute command in running container

## Docker Compose

- `docker-compose up` - Create and start services
- `docker-compose up -d` - Start in detached mode
- `docker-compose down` - Stop and remove services
- `docker-compose ps` - List running services
- `docker-compose logs` - View service logs

## Networks

- `docker network ls` - List networks
- `docker network create <name>` - Create network
- `docker network connect <network> <container>` - Connect container to network

## Volumes

- `docker volume ls` - List volumes
- `docker volume create <name>` - Create volume
- `docker volume rm <name>` - Remove volume

## System Maintenance

- `docker system df` - Show Docker disk usage
- `docker system prune` - Remove unused data
- `docker container prune` - Remove all stopped containers
- `docker image prune` - Remove unused images

Would you like me to elaborate on any specific Docker command or provide examples for a particular use case?