Docker Cheat Sheet

ORCHESTRATE

Initialize swarm mode and listen on a specific interface
```
docker swarm init --advertise-addr
10.1.0.2
```

Join an existing swarm as a manager node
```
docker swarm join --token <manager-token>
10.1.0.2:2377
```

Join an existing swarm as a worker node
```
docker swarm join --token <worker-token>
10.1.0.2:2377
```
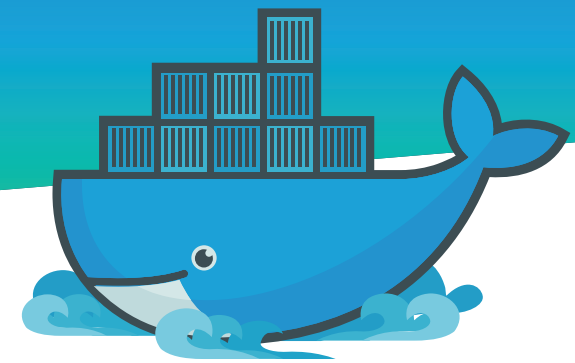
List the nodes participating in a swarm
```
docker node ls
```

Create a service from an image exposed on a specific port and deploy 3 instances
```
docker service create --replicas 3 -p
80:80 --name web nginx
```

List the services running in a swarm
```
docker service ls
```

Scale a service
```
docker service scale web=5
```

List the tasks of a service
```
docker service ps web
```

RUN

```
docker run
        --rm remove container automatically after it exits
        -it connect the container to terminal
  --name web name the container
    -p 5000:80 expose port 5000 externally and map to port 80
-v ~/dev:/code create a host mapped volume inside the container
    alpine:3.4 the image from which the container is instantiated
    /bin/sh the command to run inside the container
```

Stop a running container through SIGTERM
```
docker stop web
```

Stop a running container through SIGKILL
```
docker kill web
```

Create an overlay network and specify a subnet
```
docker network create --subnet 10.1.0.0/24
--gateway 10.1.0.1 -d overlay mynet
```

List the networks
```
docker network ls
```

List the running containers
```
docker ps
```

Delete all running and stopped containers
```
docker rm -f $(docker ps -aq)
```

Create a new bash process inside the container and connect it to the terminal
```
docker exec -it web bash
```

Print the last 100 lines of a container's logs
```
docker logs --tail 100 web
```

BUILD

Build an image from the Dockerfile in the current directory and tag the image
```
docker build -t myapp:1.0 .
```

List all images that are locally stored with the Docker engine
```
docker images
```

Delete an image from the local image store
```
docker rmi alpine:3.4
```

SHIP

Pull an image from a registry
```
docker pull alpine:3.4
```

Retag a local image with a new image name and tag
```
docker tag alpine:3.4 myrepo/myalpine:3.4
```

Log in to a registry (the Docker Hub by default)
```
docker login my.registry.com:8000
```

Push an image to a registry
```
docker push myrepo/myalpine:3.4
```