

Assisted practice 3

git clone <https://github.com/Anuj1990/SpringBootDocker.git>

ls -lart

```
root@ip-172-31-86-69:~# git clone https://github.com/Anuj1990/SpringBootDocker.git
Cloning into 'SpringBootDocker'...
remote: Enumerating objects: 52, done.
remote: Counting objects: 100% (52/52), done.
remote: Compressing objects: 100% (31/31), done.
remote: Total 52 (delta 4), reused 52 (delta 4), pack-reused 0
Unpacking objects: 100% (52/52), done.
root@ip-172-31-86-69:~# cd SpringBootDocker/
root@ip-172-31-86-69:~/SpringBootDocker# ls -lart
total 24
drwx----- 7 root root 4096 Jul 25 02:33 ..
drwxr-xr-x 4 root root 4096 Jul 25 02:33 src
-rw-r--r-- 1 root root 2601 Jul 25 02:33 pom.xml
-rw-r--r-- 1 root root 207 Jul 25 02:33 Dockerfile
drwxr-xr-x 8 root root 4096 Jul 25 02:33 .git
drwxr-xr-x 4 root root 4096 Jul 25 02:33 .
root@ip-172-31-86-69:~/SpringBootDocker#
```

mvn clean install

```
[INFO]
[INFO] Results:
[INFO]
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO]
[INFO] --- maven-jar-plugin:3.0.2:jar (default-jar) @ demo-docker ---
[INFO] Building jar: /root/SpringBootDocker/target/demo-docker-0.0.1-SNAPSHOT.jar
[INFO]
[INFO] --- spring-boot-maven-plugin:2.0.5.RELEASE:repackage (default) @ demo-docker ---
[INFO]
[INFO] --- maven-install-plugin:2.5.2:install (default-install) @ demo-docker ---
[INFO] Installing /root/SpringBootDocker/target/demo-docker-0.0.1-SNAPSHOT.jar to /root/.m2/repository/com/example/demo-docker/0.0.1-SNAPSHOT/demo-docker-0.0.1-SNAPSHOT.jar
[INFO] Installing /root/SpringBootDocker/pom.xml to /root/.m2/repository/com/example/demo-docker/0.0.1-SNAPSHOT/demo-docker-0.0.1-SNAPSHOT.pom
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 8.341 s
[INFO] Finished at: 2019-07-25T02:35:10Z
[INFO] -----
root@ip-172-31-86-69:~/SpringBootDocker#
```

docker build -t springbootapp

```
root@ip-172-31-86-69:~/SpringBootDocker# docker build -t springbootapp .
Sending build context to Docker daemon 30.99MB
Step 1/5 : FROM java:8-jdk-alpine
--> 3fd9dd82815c
Step 2/5 : COPY ./target/demo-docker-0.0.1-SNAPSHOT.jar /usr/app/
--> 03af141fea64
Step 3/5 : WORKDIR /usr/app
--> Running in c5873bb5c094
Removing intermediate container c5873bb5c094
--> c7628e48b550
Step 4/5 : RUN sh -c 'touch demo-docker-0.0.1-SNAPSHOT.jar'
--> Running in 090cab39b1ed
Removing intermediate container 090cab39b1ed
--> 80f5bfb8c92e
Step 5/5 : ENTRYPOINT ["java","-jar","demo-docker-0.0.1-SNAPSHOT.jar"]
--> Running in e3d6aaa482cc
Removing intermediate container e3d6aaa482cc
--> 5a26279c1de0
Successfully built 5a26279c1de0
Successfully tagged springbootapp:latest
root@ip-172-31-86-69:~/SpringBootDocker# docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
springbootapp	latest	5a26279c1de0	4 seconds ago	177MB
java	8-jdk-alpine	3fd9dd82815c	2 years ago	145MB

```
root@ip-172-31-86-69:~/SpringBootDocker#
```

docker images

docker tag springbootapp anujsharma1990/springboot

docker push anujsharma1990/springboot

```
root@ip-172-31-86-69:~# docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
springbootapp	latest	5a26279c1de0	6 days ago	177MB
java	8-jdk-alpine	3fd9dd82815c	2 years ago	145MB

```
root@ip-172-31-86-69:~# docker tag springbootapp anujsharma1990/springboot
root@ip-172-31-86-69:~# docker push anujsharma1990/springboot
The push refers to repository [docker.io/anujsharma1990/springboot]
3b9dfb836448: Pushed
e817cce62ea5: Pushed
a1e7033f082e: Mounted from library/java
78075328e0da: Mounted from library/java
9f8566ee5135: Mounted from library/java
latest: digest: sha256:6705b88d681e987bb8ef39339b75421fec6a65675b128b90a36a3d8dfe51a93c8 size: 1371
root@ip-172-31-86-69:~#
```

export PATH=\$HOME/bin:\$PATH

kubectl get node

```
root@ip-172-31-86-69:~# export PATH=$HOME/bin:$PATH
root@ip-172-31-86-69:~# kubectl get node
```

NAME	STATUS	ROLES	AGE	VERSION
ip-192-168-23-105.us-west-2.compute.internal	Ready	<none>	10m	v1.13.7-eks-c57ff8
ip-192-168-72-78.us-west-2.compute.internal	Ready	<none>	10m	v1.13.7-eks-c57ff8

```
root@ip-172-31-86-69:~#
```

kubectl run springbootapp--image=anujsharma1990/springboot --port=8080

kubectl expose deployment/springbootapp --port=8080 --target-port=8080 -- type=LoadBalancer

```

root@ip-172-31-86-69:~# kubectl run springbootapp --image=anujsharma1990/springboot --port=8080
deployment.apps "springbootapp" created
root@ip-172-31-86-69:~# kubectl expose deployment/springbootapp --port=8080 --target-port=8080 --type=LoadBalancer
service "springbootapp" exposed
root@ip-172-31-86-69:~# kubectl get deployments
NAME          DESIRED   CURRENT   UP-TO-DATE   AVAILABLE   AGE
springbootapp 1          1         1             1           11s
root@ip-172-31-86-69:~# kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
springbootapp-b6f746b89-sj2sq      1/1     Running   0           16s
root@ip-172-31-86-69:~# kubectl get services
NAME          TYPE          CLUSTER-IP      EXTERNAL-IP      PORT(S)          AGE
kubernetes    ClusterIP     10.100.0.1      <none>           443/TCP          45m
springbootapp LoadBalancer  10.100.132.0    a6fd149f5b407... 8080:31060/TCP   17s
root@ip-172-31-86-69:~# █

```

```

root@ip-172-31-86-69:~# kubectl describe svc springbootapp
Name:          springbootapp
Namespace:     default
Labels:        run=springbootapp
Annotations:    <none>
Selector:      run=springbootapp
Type:          LoadBalancer
IP:            10.100.132.0
LoadBalancer Ingress: a6fd149f5b40711e986440ef68ec90d9-1889437699.us-west-2.elb.amazonaws.com
Port:          <unset> 8080/TCP

```

Create Load Balancer

Actions ▾

Filter by tags and attributes or search by keyword

1 to 1 of 1

Name	DNS name	State	VPC ID	Availability Zones	Type
a6fd149f5b40711e986440ef...	a6fd149f5b40711e986440ef...		vpc-01e3c3dfaeb819a27	us-west-2b, us-west-2c...	classic

Load balancer: a6fd149f5b40711e986440ef68ec90d9

Description

Instances

Health check

Listeners

Monitoring

Tags

Migration

Basic Configuration

Name	Creation time
a6fd149f5b40711e986440ef68ec90d9	August 1, 2019 at 8:22:45 AM UTC+5:30

```
curl -w "\n" a6fd149f5b40711e986440ef68ec90d9-1889437699.us-west2.elb.amazonaws.com:8080/greet/EKSSpringboot
```

```

root@ip-172-31-86-69:~# curl -w "\n" a6fd149f5b40711e986440ef68ec90d9-1889437699.us-west-2.elb.amazonaws.com:8080/greet/EKSSpringboot
Hi!! EKSSpringboot
root@ip-172-31-86-69:~# █

```