Download your company's website files from the given link:

mkdir CaseStudy

cd CaseStudy/

git clone https://github.com/edurekacontent/dockerContent.git

```
Cloning into 'dockerContent'...
remote: Enumerating objects: 1135, done.
remote: Counting objects: 100% (1135/1135), done.
remote: Compressing objects: 100% (279/279), done.
remote: Total 1135 (delta 855), reused 1134 (delta 854), pack-reused 0
Receiving objects: 100% (1135/1135), 25.68 MiB | 20.06 MiB/s, done.
Resolving deltas: 100% (855/855), done.
```

Write a docker file that will make your company's website work out of the box with a web server (Tip You can use httpd / apache image and build on top of it)

```
root@node05:~/CaseStudy# cat Dockerfile

FROM lerndevops/openjdk8:alpine

RUN apk update && apk add /bin/sh

RUN mkdir -p /opt/app

ENV PROJECT_HOME /opt/app

COPY spring-boot-mongo.jar $PROJECT_HOME/spring-boot-mongo.jar

WORKDIR $PROJECT_HOME

EXPOSE 80

CMD ["java", "-Dspring.data.mongodb.uri=mongodb://mongo:27017/spring-mongo", "-Djava.security.egd=file:/dev/./urandom", "-jar", "./spring-boot-mongo.jar"]

root@node05:~/CaseStudy# |
```

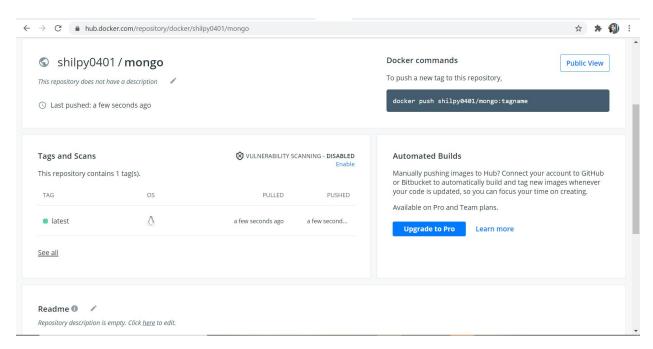
```
root@node05:-/CaseStudy# docker build . -t shilpy0401/mongo
Sending build context to Docker daemon 24.06M8
Step 1/8 : FROM Tenrdevops/openjdk8:alpine
---> a3562aa0b991
Step 2/8 : RUN apk update && apk add /bin/sh
---> Using cache
---> SS20176124e
Step 3/8 : RUN mkdir -p /opt/app
---> Using cache
---> bisco376353b
Step 4/8 : RNV PROJECT_HOME /opt/app
---> Using cache
---> bisco37d535b
Step 4/8 : RNV PROJECT_HOME /opt/app
---> Using cache
---> a57c34f7ca57
Step 5/8 : COPY spring-boot-mongo.jar $PROJECT_HOME/spring-boot-mongo.jar
---> 45af60476651
Step 6/8 : WORKOIT #GA04aee832
---> bisco34f6ca57
Step 5/8 : COPY spring-boot-mongo.jar $PROJECT_HOME /spring-boot-mongo.jar
---> 45af6047661
Step 6/8 : WORKOIT #GA04aee832
---> bisco34f6ca57
Step 5/8 : COPY spring-dockeded34
---> RUNNing ind #460a4aee832
---> bisco34f6ca56
Step 6/8 : WORKOIT #GA04aee832
---> FROME Container #GA04aee832
---> FROME Container #GA04aee832
---> FROME Container #GA04aee832
---> FROME Container #GA04aee832
---> RUNNing ind #GA04aee832
---> FROME Container #GA04aee832
---> FROME Container #GA04aee832
---> FROME Container #GA04aee832
---> FROME Container #GA04aee832
---> RUNNing in GA04aee832
---> FROME Container #GA04aee832
---> FROME Container #GA04aee832
---> FROME Container #GA04aee832
---> FROME CONTAINER *GA04aee832
---> FROME CONTAINER *GA04aee832
---> FROME GA04aee832
```

Make sure that you use volumes to store the actual data of the website outside of the container

```
root@node05:~/CaseStudy#
root@node05:~/CaseStudy# docker run -d --name DockerCaseStudy -v vol1:/root shilpy0401/mongo:latest
3326cf65298abf0dbaa6fb17201280662bde071783627dc7ccdc817243ffdadf
```

## Push the docker image to your docker hub account so that it can be pulled later

```
root@node05:~/CaseStudy# docker push shilpy0401/mongo
Using default tag: latest
The push refers to repository [docker.io/shilpy0401/mongo]
912c59f6498b: Pushed
6058600ee9e1: Pushed
b6af68d102f3: Pushed
ceaf9elebef5: Mounted from lerndevops/openjdk8
9b9b7f3d56a0: Mounted from lerndevops/openjdk8
f1b5933fe4b5: Mounted from lerndevops/openjdk8
latest: digest: sha256:a114543e29fd353213d1dc07b969a4727722bc921fa010e20adad605e025d3e4 size: 1577
root@node05:~/CaseStudy# |
```



## Create a swarm cluster

Deploy your firm's website on the swarm cluster and expose port 80 to access the

website. Also, ensure that the volumes are configured properly so that the source of the files is the same for all the containers of the service

```
root@node05:~/CaseStudy# cat compose.yml
version: '3'
services:
springbootapp:
  image: shilpy0401/mongo:latest
 container_name: springboot
 ports:
  - 80:8080
  depends_on:
  - mongo
  restart: on-failure
 mongo:
 image: lerndevops/mongo
 container_name: springboot-mongo
 ports: # for demo/debug purpose only
  - 27017:27017
 volumes:
  - /root/CaseStudy/data:/data/db
  - /root/CaseStudy/data-bkp:/data/bkp
  restart: always
root@node05:~/CaseStudy#
```

```
root@node05:~/CaseStudy# docker-compose -f compose.yml up -d
springboot-mongo is up-to-date
springboot is up-to-date
root@node05:~/CaseStudy# |
```

