7.Create a Dockerfile and build image finally run it also push into Docker hub?
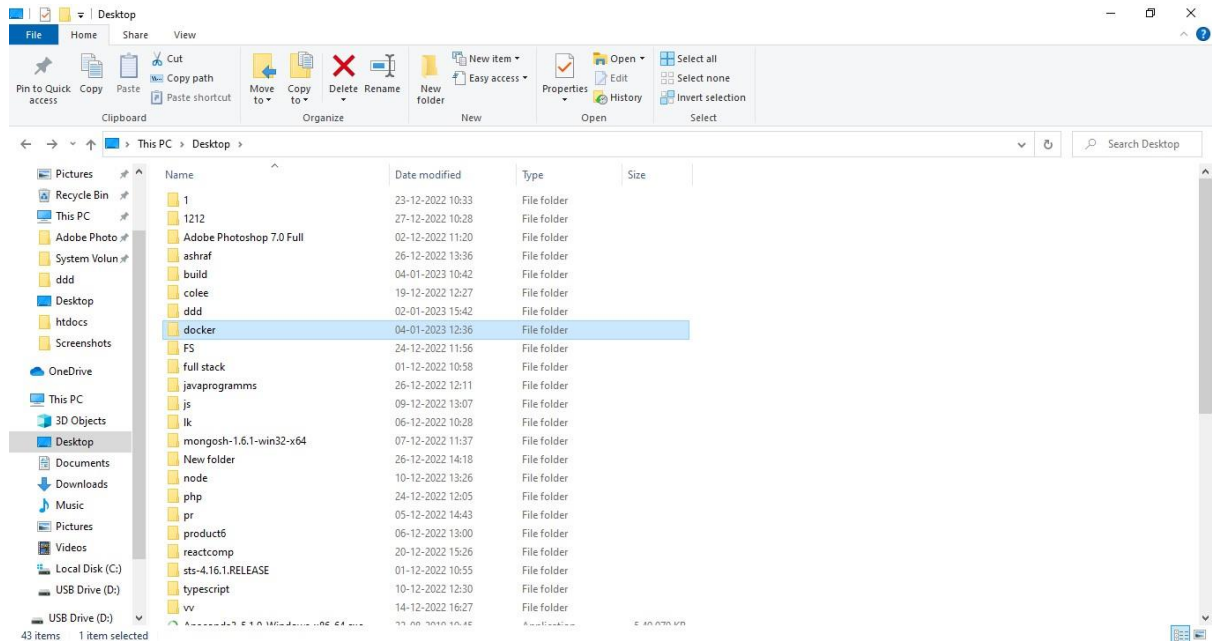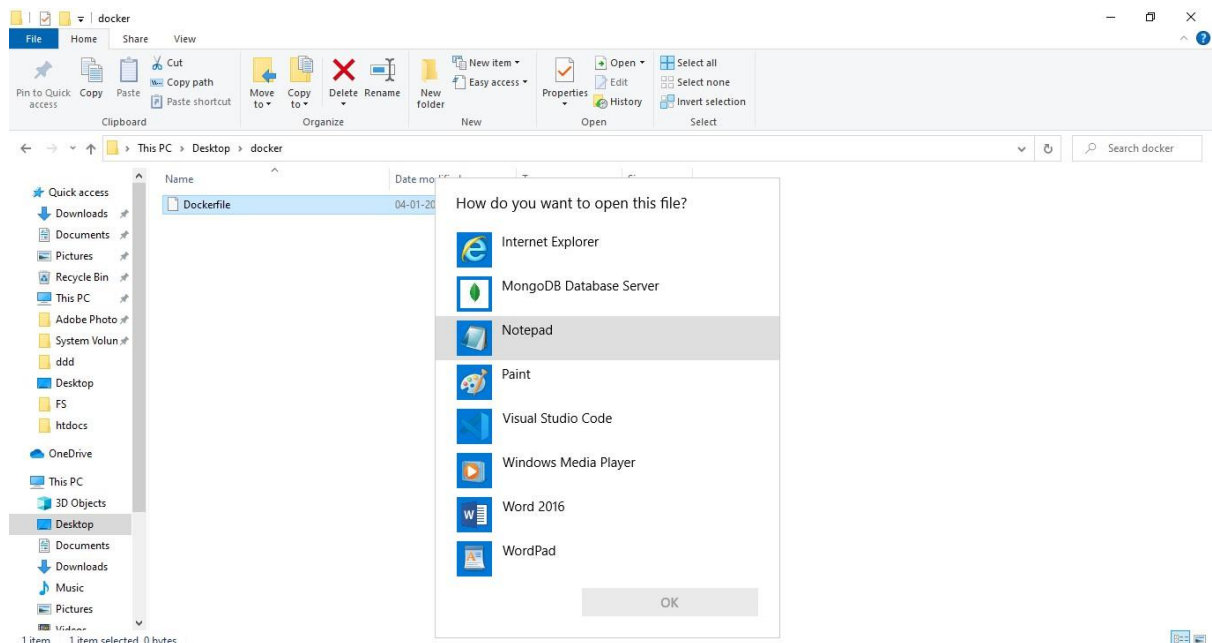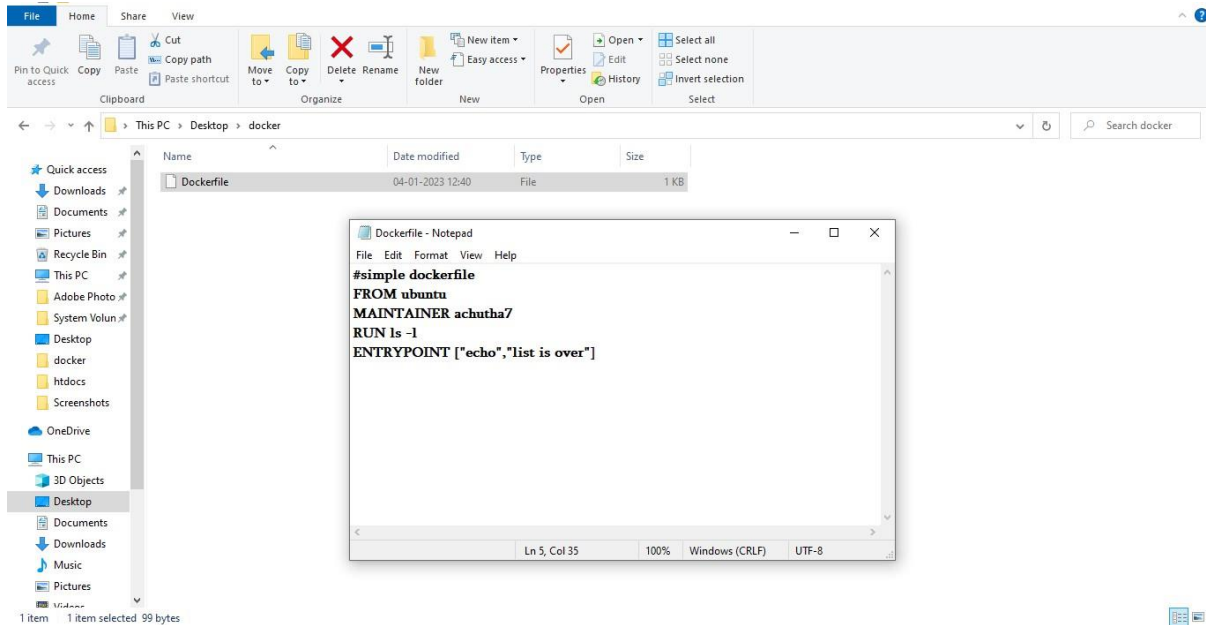
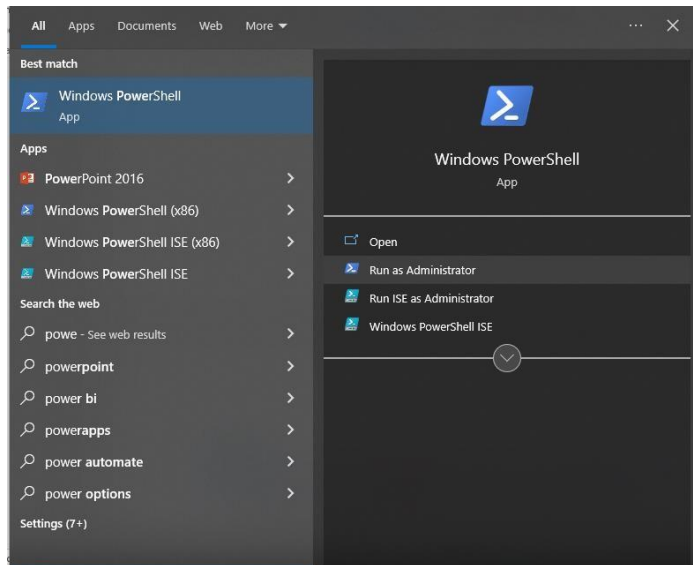Step1- Create a folder as docker at any location

Step2- Create a file as Dockerfile inside the docker folder

Step3- open Dockerfile with notepad and type as follows:

Step4- open windows Powershell as Administartor

Step5- Give location path of the folder

Step6- Build a image

Step7-View images

```
PS C:\Users\CSE\Desktop\docker> docker images
REPOSITORY           TAG       IMAGE ID       CREATED             SIZE
achutha7/build.jar   latest    335a9c9ecd68   About an hour ago   490MB
build.jar            latest    335a9c9ecd68   About an hour ago   490MB
build.jar            v2        335a9c9ecd68   About an hour ago   490MB
cse                  v1        95b8ae8acd6b   45 hours ago        77.8MB
fifthsem             v1        95b8ae8acd6b   45 hours ago        77.8MB
suraj                1.0       95b8ae8acd6b   45 hours ago        77.8MB
achutha7/fifthsem    latest    95b8ae8acd6b   45 hours ago        77.8MB
achutha7/suraj       latest    95b8ae8acd6b   45 hours ago        77.8MB
<none>               <none>    3f5c4351e78e   47 hours ago        490MB
<none>               <none>    3cf854cb845f   4 days ago          490MB
PS C:\Users\CSE\Desktop\docker>
```

Step8- Create a container and view

```
PS C:\Users\CSE\Desktop\docker> docker run cse:1.0
list is over
PS C:\Users\CSE\Desktop\docker> docker ps -a
CONTAINER ID   IMAGE               COMMAND                CREATED          STATUS                      PORTS     NAMES
6fdcbf94c991   cse:1.0             "echo 'list is over'"  14 seconds ago   Exited (0) 12 seconds ago             nifty_lederberg
b9beef56beb8   cse:v1              "echo 'list is over'"  11 minutes ago   Exited (0) 11 minutes ago             intelligent_jang
f666c5b01744   achutha7/suraj      "echo 'list is over'"  54 minutes ago   Exited (0) 54 minutes ago             great_kalam
dcfe0386cecc   achutha7/suraj      "echo 'list is over'"  54 minutes ago   Created                               cranky_fermi
e202bc6df638   suraj:1.0           "echo 'list is over'"  About an hour ago Exited (0) About an hour ago         wizardly_nash
8e2f0fb43143   achutha7/build.jar  "java -jar /build.jar" 2 hours ago      Exited (143) About an hour ago        suspicious_wright
b8ad3c44e3f8   build.jar           "java -jar /build.jar" 2 hours ago      Created                               zealous_elbakyan
8023c5db79c3   fifthsem:v1         "echo 'list is over'"  45 hours ago     Exited (0) 45 hours ago               exciting_chandrasekhar
```

Step9- Create a tag to push images into docker hub

```
PS C:\Users\CSE\Desktop\docker> docker tag cse:1.0 achutha7/cse:1.0
PS C:\Users\CSE\Desktop\docker> docker images
REPOSITORY           TAG       IMAGE ID       CREATED        SIZE
achutha7/build.jar   latest    335a9c9ecd68   2 hours ago    490MB
build.jar            latest    335a9c9ecd68   2 hours ago    490MB
build.jar            v2        335a9c9ecd68   2 hours ago    490MB
suraj                1.0       95b8ae8acd6b   45 hours ago   77.8MB
achutha7/cse         1.0       95b8ae8acd6b   45 hours ago   77.8MB
achutha7/cse         latest    95b8ae8acd6b   45 hours ago   77.8MB
achutha7/fifthsem    latest    95b8ae8acd6b   45 hours ago   77.8MB
achutha7/suraj       latest    95b8ae8acd6b   45 hours ago   77.8MB
acutha7/cse          latest    95b8ae8acd6b   45 hours ago   77.8MB
```

Step10- push image to docker hub

```
PS C:\Users\CSE\Desktop\docker> docker push achutha7/cse
Using default tag: latest
The push refers to repository [docker.io/achutha7/cse]
5f70bf18a086: Pushed
6515074984c6: Pushed
latest: digest: sha256:1fc76abd2a2f0252d2a53f95f6f70ff5c655fe408961c5381178f83ad6ff81a3 size: 735
```

Step11- Open docker hub to check the Repository

Step12- pull the container from docker hub

```
PS C:\Users\CSE\Desktop\docker> docker pull achutha7/cse
Using default tag: latest
latest: Pulling from achutha7/cse
Digest: sha256:1fc76abd2a2f0252d2a53f95f6f70ff5c655fe408961c5381178f83ad6ff81a3
Status: Image is up to date for achutha7/cse:latest
docker.io/achutha7/cse:latest
PS C:\Users\CSE\Desktop\docker>
```