Assignment 2(b)

b. Create Docker Container Environment (NVIDEIA Docker or any other).

```
Microsoft Windows [Version 10.0.22631.4751]
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C:\Users\exam>docker -v
Docker version 24.0.6, build ed223bc

C:\Users\exam>docker pull openjdk
Using default tag: latest
latest: Pulling from library/openjdk
Digest: sha256:9b448de897d211c9e0ec635a485650aed6e28d4eca1efbc34940560a480b3f1f
Status: Image is up to date for openjdk:latest
docker.io/library/openjdk:latest

What's Next?
  1. Sign in to your Docker account → docker login
  2. View a summary of image vulnerabilities and recommendations → docker scout quickview openjdk

C:\Users\exam>docker image

Usage:  docker image COMMAND

Manage images

Commands:
  build      Build an image from a Dockerfile
  history    Show the history of an image
  import     Import the contents from a tarball to create a filesystem image
  inspect    Display detailed information on one or more images
  load       Load an image from a tar archive or STDIN
  ls         List images
  prune      Remove unused images
  pull       Download an image from a registry
  push       Upload an image to a registry
  rm         Remove one or more images
  save       Save one or more images to a tar archive (streamed to STDOUT by default)
```

```
Run 'docker image COMMAND --help' for more information on a command.

C:\Users\exam>docker images
REPOSITORY      TAG       IMAGE ID       CREATED         SIZE
2b              latest    e6168e1b015b   3 weeks ago     163MB
python          latest    36d17f72f4f3   6 weeks ago     1.02GB
assignment2b    latest    bb4e94edea03   12 months ago   141MB
practical2b     latest    8384b34f9f54   12 months ago   141MB
openjdk         latest    71260f256d19   2 years ago     470MB

C:\Users\exam>docker run --name JAVA -it -d openjdk
90674dec6b007c10bd4534837371a08ba140f3409b9a462d776898217ed578fc
```

```
C:\Users\exam>docker exec -it JAVA jshell
|  Welcome to JShell -- Version 18.0.2.1
|  For an introduction type: /help intro

jshell> System.out.println("Hello world");
Hello world

jshell> int a=30;
a ==> 30

jshell> int b=6;
b ==> 6

jshell> System.out.println(a*b);
180

jshell> System.out.println(a+b);
36

jshell> docker ps
|  created variable ps, however, it cannot be referenced until class docker is declared

jshell> /exit
|  Goodbye

C:\Users\exam>docker ps
CONTAINER ID   IMAGE     COMMAND     CREATED        STATUS        PORTS     NAMES
90674dec6b00   openjdk   "jshell"    4 minutes ago  Up 4 minutes            JAVA

C:\Users\exam>docker container rm 90674dec6b00
Error response from daemon: You cannot remove a running container 90674dec6b007c10bd4534837371a08ba140f3409b9a462d776898217ed578fc. Stop the contain
er before attempting removal or force remove

C:\Users\exam>docker stop 90674dec6b004d
```
Spyder (Anaconda3)

```
C:\Users\exam>docker stop 90674dec6b00
90674dec6b00

C:\Users\exam>docker images
REPOSITORY        TAG        IMAGE ID        CREATED         SIZE
2b                latest     e6168e1b015b    3 weeks ago     163MB
python            latest     36d17f72f4f3    6 weeks ago     1.02GB
assignment2b      latest     bb4e94edea03    12 months ago   141MB
practical2b       latest     8384b34f9f54    12 months ago   141MB
openjdk           latest     71260f256d19    2 years ago     470MB

C:\Users\exam>docker image prune
WARNING! This will remove all dangling images.
Are you sure you want to continue? [y/N] y
Total reclaimed space: 0B
```