Docker Tasks

First Task

1. Create a docker container using busybox.

```
a2lbraispn@a0leql21:~$ docker run -it busybox:1.37
/ # ls
bin etc lib proc sys usr
dev home lib64 root tmp var
```

2. Create two files within busybox.

```
# touch a.txt
  # touch b.txt
 # ls
                       lib
a.txt
       bin
               etc
                               proc
                                       sys
                                               usr
                       lib64
b.txt
       dev
               home
                               root
                                       tmp
                                               var
```

3. Create a new image with the updated container. Call this image your_user/busybox.

```
a21braispn@a01eql21:~$ docker commit a29324d10423 a21braispn/busybox
sha256:15a48081e980a78572d14660d7456f0b13fea0394c7c9f3431d6f43255d23b8f
a21braispn@a01eql21:~$ docker images
REPOSITORY
                            TAG
                                      IMAGE ID
                                                      CREATED
                                                                        SIZE
a21braispn/busybox
                            latest
                                      15a48081e980
                                                      18 seconds ago
                                                                       4.43MB
my dockerhub name/debian
                            latest
                                      c417dfa05590
                                                      25 hours ago
                                                                       320MB
my dockerhub name/debian
                                      15bf4655f9c7
                                                      25 hours ago
                                                                        275MB
                            1.00
debian
                            12-slim
                                      7b234376c422
                                                      11 days ago
                                                                        74.8MB
debian
                            latest
                                      999ffdddc152
                                                      11 days ago
                                                                        120MB
                            1.37
busybox
                                      0ed463b26dae
                                                      11 months ago
                                                                       4.43MB
tomcat
                            8.0
                                      ef6a7c98d192
                                                      7 years ago
                                                                       356MB
```

4. Create and run a container using this new image. Connect to this container and check that the files you had created are in this image.

```
a21braispn@a01eql21:~$ docker run -it a21braispn/busybox:latest
/ # ls
a.txt
       bin
              etc
                      lib
                             proc
                                     sys
                                            usr
                      lib64
b.txt
      dev
              home
                             root
                                     tmp
                                            var
```

5. Check the images and containers running on your system.

```
<mark>:ql21:~$ docker ps -a</mark>
IMAGE
a21braispn@a0
CONTAINER ID
                                                                                                COMMAND
                                                                                                                                         CREATED
                                                                                                                                                                                                                                                                  NAMES
                                                                                                                                                                                                                                                                  dreamy_greider
pensive_spence
dazzling_liskov
gallant_zhukovsky
b0074ead65e4
a29324d10423
                                                                                                 "sh"
"sh"
                                                                                                                                         About a minute ago
9 minutes ago
                                                                                                                                                                                    Exited (0) 7 seconds ago
Exited (0) 7 minutes ago
                               a21braispn/busybox:latest
                              busybox:1.37
                                                                                                                                                                                   Exited (0) 7 minutes ago
Exited (0) 36 minutes ago
Exited (0) 39 minutes ago
Exited (0) 39 minutes ago
Exited (0) 25 hours ago
Exited (0) 25 hours ago
Exited (127) 25 hours ago
Exited (127) 4 days ago
Exited (0) 4 days ago
Exited (0) 4 days ago
Exited (0) 4 days ago
Exited (143) 3 days ago
                              my_dockerhub_name/debian
my_dockerhub_name/debian
64a7e273fea9
cf3a69ae4903
                                                                                                "/bin/bash"
"/bin/bash"
                                                                                                                                         38 minutes ago
39 minutes ago
                              my_dockerhub_name/debian
my_dockerhub_name/debian
                                                                                                                                         40 minutes ago
25 hours ago
                                                                                                                                                                                                                                                                  stoic_mclean
 dcf6322a7ff6
                                                                                                 "/bin/bash"
                                                                                                                                                                                                                                                                 recursing roentgen
jolly_haibt
cool_mclaren
cool_maxwell
 fe81d0ada08b
                                                                                                  '/bin/bash'
3c4e40e7f5eb
c543ca2b7ce6
                              my_dockerhub_name/debian:1.00
debian:latest
                                                                                                                                         25 hours ago
25 hours ago
                                                                                                 "bash"
                                                                                                 "bash"
                                                                                                                                         4 days ago
4 days ago
4 days ago
 fe4143cf64ff
                                                                                                                                                                                                                                                                  serene_wilbur
nifty_shtern
vigilant_euclid
                              busybox:1.37
busybox:1.37
1f684074db70
                                                                                                 "sh"
03a48a361598
                                                                                                 "catalina.sh run"
                                                                                                                                         4 days ago
                              tomcat:8.0
                                                                           IMAGE ID
15a48081e980
c417dfa05590
15bf4655f9c7
REPOSITORY
                                                       TAG
                                                                                                          CREATED
                                                                                                                                           SIZE
                                                                                                                                           4.43MB
320MB
275MB
                                                        latest
 a21braispn/busybox
                                                                                                           4 minutes ago
my_dockerhub_name/debian
my_dockerhub_name/debian
debian
debian
                                                                                                          25 hours ago
25 hours ago
                                                       latest
1.00
                                                       12-slim
latest
                                                                           7b234376c422
999ffdddc152
                                                                                                          11 days ago
11 days ago
                                                                                                                                           74.8MB
120MB
                                                                                                          11 months ago
7 years ago
 busybox
                                                                            0ed463b26dae
                                                                                                                                           4.43MB
                                                                            ef6a7c98d192
                                                       8.0
 tomcat
```

6. Delete the image and the container.

```
a2lbraispn@a0leql21:-$ docker rm b0074ead65e4
b0074ead65e4
a2lbraispn@a0leql21:-$ docker ps -a
CONTAINER ID IMAGE
a29324d10423 busybox:1.37
64a7e273fea9 my_dockerhub_name/debian
                                                                                                                                                                                                                                STATUS
Exited (0) 9 minutes ago
Exited (0) 38 minutes ago
Exited (0) 41 minutes ago
Exited (0) 41 minutes ago
Exited (0) 25 hours ago
Exited (0) 25 hours ago
Exited (127) 25 hours ago
Exited (127) 25 hours ago
Exited (127) 4 days ago
Exited (0) 4 days ago
Exited (0) 4 days ago
Exited (0) 4 days ago
Exited (143) 3 days ago
                                                                                                                             COMMAND
"sh"
"/bin/bash"
                                                                                                                                                                                     CREATED
                                                                                                                                                                                                                                                                                                              PORTS
                                                                                                                                                                                                                                                                                                                                         NAMES
                                      IMAGE
busybox:1.37
my_dockerhub_name/debian
my_dockerhub_name/debian
my_dockerhub_name/debian
my_dockerhub_name/debian
my_dockerhub_name/debian:1.00
debian:latest
debian:2.s.lim
                                                                                                                                                                                                                                                                                                                                        NAMES
pensive spence
dazzling liskov
gallant zhukovsky
stoic mclean
recursing roentgen
jolly haibt
cool mclaren
cool maxwell
                                                                                                                                                                                    11 minutes ago
39 minutes ago
                                                                                                                                                                                   41 minutes ago
42 minutes ago
25 hours ago
25 hours ago
25 hours ago
                                                                                                                               "/bin/bash"
"/bin/bash"
"/bin/bash"
  e81d0ada08b
 3c4e40e7f5eb
c543ca2b7ce6
fe4143cf64ff
                                    debian:12-slim
busybox:1.37
busybox:1.37
tomcat:8.0
                                                                                                                                                                                   4 days ago
4 days ago
4 days ago
4 days ago
                                                                                                                                "bash'
                                                                                                                                                                                                                                                                                                                                         serene_wilbur
nifty_shtern
vigilant_euclid
1f684074db70
5c6d0d7a81e1
                                                                                                                               "sh"
                                                                                                                                "catalina.sh run"
 03a48a361598
TAG
latest
                                                                                                   IMAGE ID
c417dfa05590
15bf4655f9c7
                                                                                                                                            CREATED
                                                                                                                                           25 hours ago
11 days ago
11 days ago
11 months ago
7 years ago
                                                                                                                                                                                      320MB
275MB
74.8MB
120MB
 my_dockerhub_name/debian
                                                                        1.00
12-slim
latest
      dockerhub name/debian
 debian
debian
                                                                                                  7b234376c422
999ffdddc152
busybox
tomcat
                                                                        1.37
                                                                                                   0ed463b26dae
                                                                                                                                                                                       4.43MB
356MB
   21braispn@a01eql21:~$
```

Second Task

7. Create a Dockerfile that does the previous tasks.

FROM busybox:1.37

RUN touch /a.txt /b.txt

CMD ["sh"]

8. Create a new image called your_user/busybox and run the container.

```
a21braispn@a01eql21:~$ docker build -t a21braispn/busybox .

[+] Building 0.2s (6/6) FINISHED

=> [internal] load build definition from Dockerfile

=> => transferring dockerfile: 91B

=> [internal] load metadata for docker.io/library/busybox:1.37

=> [internal] load .dockerignore

=> => transferring context: 2B

=> CACHED [1/2] FROM docker.io/library/busybox:1.37

=> [2/2] RUN touch /a.txt /b.txt

=> exporting to image

=> => exporting layers

=> => writing image sha256:ede0f5fbce5b0543f5469ee0b00e28c4be128181dd724a7f7ab962146939e81c

=> => naming to docker.io/a21braispn/busybox

a21braispn@a01eql21:~$ docker run -it a21braispn/busybox

/ # ls

a.txt b.txt bin dev etc home lib lib64 proc root sys tmp usr var
```

9. Check the images and containers running on your system.

```
21:~$ docker ps -a
CONTAINER ID
              IMAGE
                                                COMMAND
                                                                     CREATED
                                                                                           STATUS
   PORTS
              NAMES
                                                "sh"
2ce17771bb7b
              a21braispn/busybox
                                                                     About a minute ago
                                                                                           Exited (0) 45 seconds ago
              adoring_jones
              c6aa6038450f
98bc90d2a099
                                                                                           Exited (130) About a minute ag
                                                                     2 minutes ago
              stoic elgamal
898a802899f8
               c6aa6038450f
                                                                     2 minutes ago
                                                                                           Exited (0) 2 minutes ago
              elastic austin
c1f41bdcbdd
              c6aa6038450f
                                                "/bin/bash"
                                                                     4 minutes ago
                                                                                           Created
              charming_cartwright
a29324d10423
              busybox:1.37
                                                "sh"
                                                                     24 minutes ago
                                                                                           Exited (0) 22 minutes ago
              pensive spence
              my_dockerhub_name/debian
64a7e273fea9
                                                "/bin/bash"
                                                                     53 minutes ago
                                                                                           Exited (0) 51 minutes ago
              dazzling_liskov
f3a69ae4903
              my_dockerhub_name/debian
                                                "/bin/bash"
                                                                                           Exited (0) 54 minutes ago
                                                                     54 minutes ago
              gallant_zhukovsky
dcf6322a7ff6
              my dockerhub name/debian
                                                "/bin/bash"
                                                                     55 minutes ago
                                                                                           Exited (0) 54 minutes ago
              stoic mclean
fe81d0ada08b
              my_dockerhub_name/debian
                                                "/bin/bash"
                                                                     25 hours ago
                                                                                           Exited (0) 25 hours ago
              recursing roentgen
              my_dockerhub_name/debian:1.00
jolly_haibt
3c4e40e7f5eb
                                                "bash"
                                                                     25 hours ago
                                                                                           Exited (0) 25 hours ago
c543ca2b7ce6
              debian:latest
                                                                     25 hours ago
                                                                                           Exited (127) 25 hours ago
                                                "bash"
              cool_mclaren
              debīan:12-slim
fe4143cf64ff
                                                "bash"
                                                                     4 days ago
                                                                                           Exited (127) 4 days ago
              cool_maxwell
1f684074db70
              busybox:1.37
                                                "sh"
                                                                                           Exited (0) 4 days ago
                                                                     4 days ago
              serene_wilbur
5c6d0d7a81e1
              busybox:1.37
                                                "sh"
                                                                     4 days ago
                                                                                           Exited (0) 4 days ago
              nifty_shtern
93a48a361598
              tomcat:8.0
                                                "catalina.sh run"
                                                                     4 days ago
                                                                                           Exited (143) 3 days ago
              vigilant euclid
21braispn@a01eql21:~$ docker images
REPOSITORY
                                      IMAGE ID
                                                     CREATED
                                                                           SIZE
a21braispn/busybox
                                      ede0f5fbce5b
                                                     About a minute ago
                                                                           4.43MB
                                      c6aa6038450f
                                                     5 minutes ago
                                                                           4.43MB
<none>
                           <none>
my_dockerhub_name/debian
                                      c417dfa05590
                                                     25 hours ago
                                                                           320MB
                           latest
my_dockerhub_name/debian
                                      15bf4655f9c7
                                                                           275MB
                                                     25 hours ago
                           1.00
debian
                           12-slim
                                      7b234376c422
                                                     11 days ago
                                                                           74.8MB
                                      999ffdddc152
debian
                           latest
                                                     11 days ago
                                                                           120MB
busybox
                                      0ed463b26dae
                                                      11 months ago
                                                                           4.43MB
                           8.0
                                      ef6a7c98d192
                                                     7 years ago
                                                                           356MB
omcat
21braispn@a01eql21:~$
```

10. Delete the image and the container.

a21braispn@a01eql21:~\$ docker rm 2ce17771bb7 2ce17771bb7

a21braispn@a01eql21:~\$ docker rmi ede0f5fbce5b Untagged: a21braispn/busybox:latest

Deleted: sha256:ede0f5fbce5b0543f5469ee0b00e28c4be128181dd724a7f7ab962146939e81c