

Name: Sarah Aldrees

ID: 201363

Q1:

Command: docker pull sebp/lighttpd

Screenshot:

```
sarah201363 -- -zsh -- 138x21
Last login: Wed Nov 16 13:00:51 on ttys001
/dev/fd/12:18: command not found: compdef
(base) sarahaldrees@Sarahs-MacBook-Pro ~ % docker pull sebp/lighttpd
Using default tag: latest
latest: Pulling from sebp/lighttpd
b3c136eddcdf: Pull complete
61f90cb7c4b0: Pull complete
7415d89e9a3b: Pull complete
e2617643d879: Pull complete
Digest: sha256:43d2a1c6d6a2ef85cc1914daa7dbb16776b2ec8bd0e0e7b824caa9bc5079773c
Status: Downloaded newer image for sebp/lighttpd:latest
docker.io/sebp/lighttpd:latest
```

Command: docker image tag 6327821a201f saldreес/sarah-201363:latest

Screenshot:

```
sarah201363 -- -zsh -- 160x42
(base) sarahaldrees@Sarahs-MacBook-Pro ~ % docker images
REPOSITORY          TAG         IMAGE ID      CREATED       SIZE
httpd                latest      70f5715e0942  28 hours ago  139MB
ubuntu              latest      3c2df5585507  13 days ago   69.2MB
bulletinboard        1.0         f7184ea063ac  2 weeks ago   257MB
saldrees/bulletinboard 1.0         f7184ea063ac  2 weeks ago   257MB
saldrees/se443-first-repository 1.0         f7184ea063ac  2 weeks ago   257MB
nginx                latest      30d2ef10a9fc  3 weeks ago   135MB
alpine/git           latest      ab1b179f0e50  3 weeks ago   43.4MB
sebp/lighttpd        latest      6327821a201f  4 months ago  9.02MB
docker/getting-started latest      157095baba98  7 months ago  27.4MB
hello-world          latest      46331d942d63  8 months ago  9.14kB
(base) sarahaldrees@Sarahs-MacBook-Pro ~ % docker image tag 6327821a201f saldreес/Sarah-201363:latest
Error parsing reference: "saldrees/Sarah-201363:latest" is not a valid repository/tag: invalid reference format: repository name must be lowercase
(base) sarahaldrees@Sarahs-MacBook-Pro ~ % docker image tag 6327821a201f saldreес/sarah-201363:latest
(base) sarahaldrees@Sarahs-MacBook-Pro ~ % docker images
REPOSITORY          TAG         IMAGE ID      CREATED       SIZE
httpd                latest      70f5715e0942  28 hours ago  139MB
ubuntu              latest      3c2df5585507  13 days ago   69.2MB
bulletinboard        1.0         f7184ea063ac  2 weeks ago   257MB
saldrees/bulletinboard 1.0         f7184ea063ac  2 weeks ago   257MB
saldrees/se443-first-repository 1.0         f7184ea063ac  2 weeks ago   257MB
nginx                latest      30d2ef10a9fc  3 weeks ago   135MB
alpine/git           latest      ab1b179f0e50  3 weeks ago   43.4MB
saldrees/sarah-201363 latest      6327821a201f  4 months ago  9.02MB
sebp/lighttpd        latest      6327821a201f  4 months ago  9.02MB
docker/getting-started latest      157095baba98  7 months ago  27.4MB
hello-world          latest      46331d942d63  8 months ago  9.14kB
```

Q2:

Command: mkdir sarah201363

Screenshot:

```
(base) sarahaldrees@Sarahs-MacBook-Pro ~ % mkdir sarah201363
```

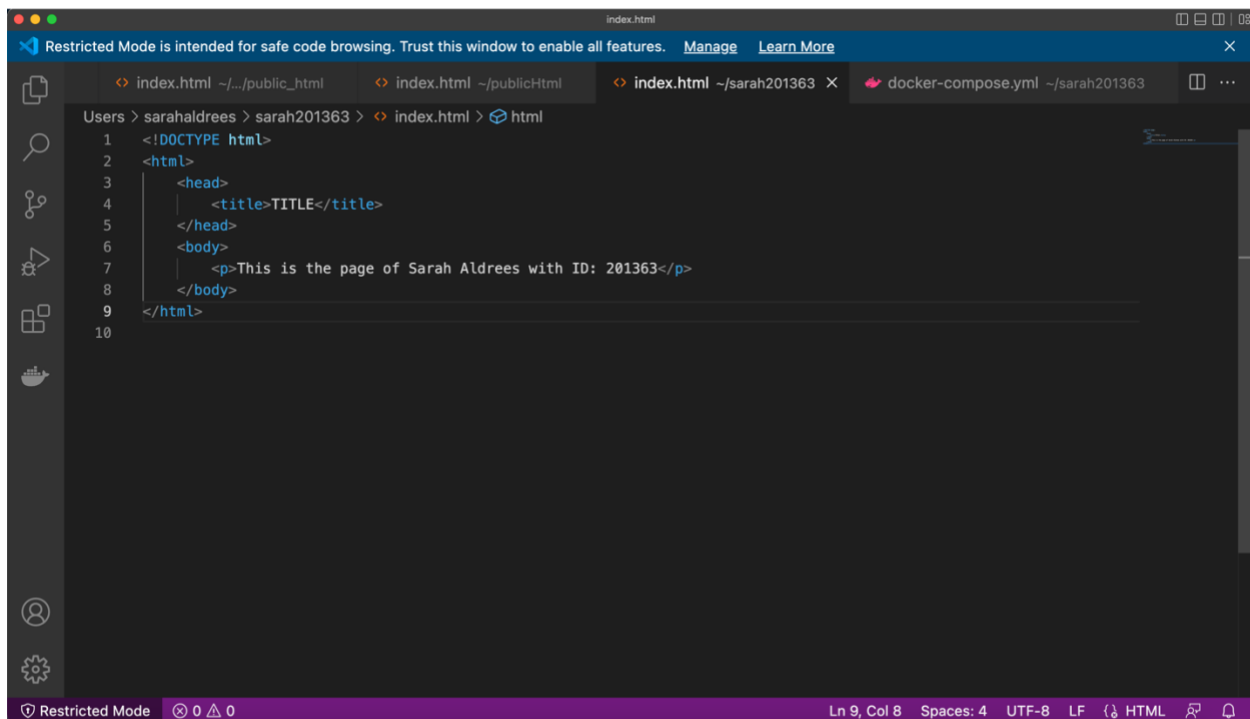
Q3:

Command: mkdir sarah201363

echo "" > sarah201363/index.html

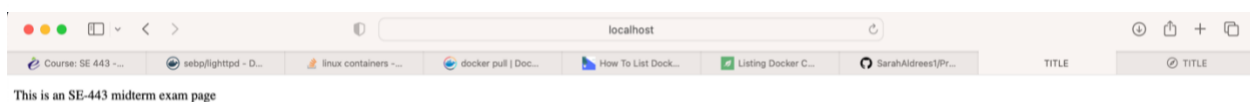
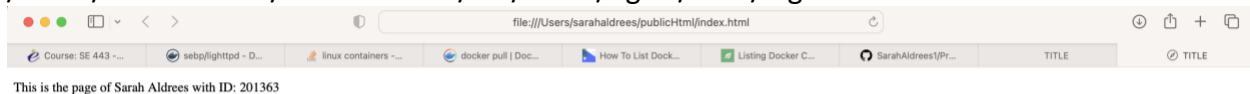
Screenshot:

```
(base) sarahaldrees@Sarahs-MacBook-Pro ~ % mkdir sarah201363
[(base) sarahaldrees@Sarahs-MacBook-Pro ~ % echo "" > sarah201363/index.html
..
```



Q4:

Command: `docker run --name web_serverss -d -p 8008:80 -v /Users/sarahaldrees/sarah201363:/usr/share/nginx/html/ nginx`
Screenshot:



Q5:

a) Command: `docker images -a`

Screenshot:

```
(base) sarahaldrees@Sarahs-MacBook-Pro ~ % docker images -a
REPOSITORY          TAG         IMAGE ID      CREATED        SIZE
httpd                latest      70f5715e0942  28 hours ago  139MB
ubuntu              latest      3c2df558507   13 days ago   69.2MB
saldrees/se443-first-repository 1.0         f7184ea063ac  2 weeks ago   257MB
bulletinboard        1.0         f7184ea063ac  2 weeks ago   257MB
saldrees/bulletinboard 1.0         f7184ea063ac  2 weeks ago   257MB
nginx                latest      30d2ef10a9fc  3 weeks ago   135MB
alpine/git           latest      ab1b179f0e50  3 weeks ago   43.4MB
saldrees/sarah-201363 latest      6327821a201f  4 months ago  9.02MB
sebp/lighttpd        latest      6327821a201f  4 months ago  9.02MB
docker/getting-started latest      157095baba98  7 months ago  27.4MB
hello-world          latest      46331d942d63  8 months ago  9.14kB
```

b) Command: docker images

Screenshot:

```
(base) sarahaldrees@Sarahs-MacBook-Pro ~ % docker images
REPOSITORY          TAG         IMAGE ID      CREATED        SIZE
httpd                latest      70f5715e0942  28 hours ago  139MB
ubuntu              latest      3c2df5585507  13 days ago   69.2MB
bulletinboard        1.0         f7184ea063ac  2 weeks ago   257MB
saldrees/bulletinboard 1.0         f7184ea063ac  2 weeks ago   257MB
saldrees/se443-first-repository 1.0         f7184ea063ac  2 weeks ago   257MB
nginx                latest      30d2ef10a9fc  3 weeks ago   135MB
alpine/git           latest      ab1b179f0e50  3 weeks ago   43.4MB
saldrees/sarah-201363 latest      6327821a201f  4 months ago  9.02MB
sebp/lighttpd        latest      6327821a201f  4 months ago  9.02MB
docker/getting-started latest      157095baba98  7 months ago  27.4MB
hello-world          latest      46331d942d63  8 months ago  9.14kB
```

c) Command: docker ps (running)

Screenshot:

```
(base) sarahaldrees@Sarahs-MacBook-Pro ~ % docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED    STATUS    PORTS    NAMES
3b98e937dcbf   nginx    "/docker-entrypoint.    16 hours ago Up 16 hours 0.0.0.0:8080->80/tcp web_servedr
```

d) Command: docker ps -a (running & not running)

Screenshot:

```
(base) sarahaldrees@Sarahs-MacBook-Pro ~ % docker ps -a
CONTAINER ID   IMAGE                                COMMAND                  CREATED    STATUS    PORTS    NAMES
55fd002a89d0   saldrees/sarah-201363:latest       "start.sh"              10 minutes ago Exited (255) 10 minutes ago      sar
3b98e937dcbf   nginx                                "/docker-entrypoint.    16 hours ago Up 16 hours 0.0.0.0:8080->80/tcp web_servedr
0331a06080d8a   nginx                                "/docker-entrypoint.    16 hours ago Exited (0) 16 hours ago web_servser
94210d367f77   httpd:latest                        "httpd-foreground"      16 hours ago Exited (0) 16 hours ago practice_web.1.iy
7px08ap0y8jpdkulinx166a   httpd:latest                        "httpd-foreground"      16 hours ago Exited (0) 16 hours ago practice_web.5.r3
eeeb325b0746   httpd:latest                        "httpd-foreground"      16 hours ago Exited (0) 16 hours ago practice_web.2.k1
lsqkgi36r39fqh665r35nz1   httpd:latest                        "httpd-foreground"      16 hours ago Exited (0) 16 hours ago practice_web.4.hm
bc1dd45a21e9   httpd:latest                        "httpd-foreground"      16 hours ago Exited (0) 16 hours ago practice_web.3.h0
trllrkwtj8y2c44amnp3y3   httpd:latest                        "httpd-foreground"      16 hours ago Exited (129) 2 days ago modest_lehmann
28e48c3ea1d7   httpd:latest                        "httpd-foreground"      16 hours ago Exited (255) 23 hours ago web_server
86josijjc0o4c0bs68lscpr   httpd:latest                        "httpd-foreground"      16 hours ago Exited (255) 23 hours ago my_nginx
106144c423a8   httpd:latest                        "httpd-foreground"      16 hours ago Exited (255) 13 days ago bb
q3m7zk10of27op5yom41d88   ubuntu                               "bash"                  2 days ago Exited (0) 3 weeks ago peaceful_swartz
811c1f63a6bf   ubuntu                               "docker-entrypoint.    6 days ago Exited (255) 23 hours ago jovial_shocklev
e51bf28ce69b   nginx                                "/docker-entrypoint.    9 days ago Exited (255) 13 days ago
56b08f08f1c8   nginx                                "docker-entrypoint.s    2 weeks ago Exited (0) 3 weeks ago
f507237e49b2   bulletinboard:1.0                  "hello"                 3 weeks ago Exited (255) 2 weeks ago
77aafceb7019   hello-world                         "/docker-entrypoint.    3 weeks ago Exited (255) 2 weeks ago
```

Q6:

Command: docker kill 3b98e937dcbf

Screenshot:

```
[(base) sarahaldrees@Sarahs-MacBook-Pro sarah201363 % docker kill 3b98e937dcbf
3b98e937dcbf
```

Q7:

Command: docker rm 3b98e937dcbf

Screenshot:

```
[(base) sarahaldrees@Sarahs-MacBook-Pro sarah201363 % docker rm 3b98e937dcbf
3b98e937dcbf
```

Q8:

Command: docker swarm init

docker stack deploy -c docker-compose.yml midterm2

docker service ls

```

sarah201363 -- -zsh -- 138x21
: non-zero exit (255)"
(base) sarahaldrees@Sarahs-MacBook-Pro sarah201363 % docker container ls -q
ae675af7ada0
3b98e937dcbf
(base) sarahaldrees@Sarahs-MacBook-Pro sarah201363 % docker swarm leave --force
Node left the swarm.
(base) sarahaldrees@Sarahs-MacBook-Pro sarah201363 % docker swarm init
Swarm initialized: current node (van2fe811vu3fj8doa5shpoj2) is now a manager.

To add a worker to this swarm, run the following command:

    docker swarm join --token SWMTKN-1-32820jga5pk949bcph3qkyd0p1ovmn0ekxo3xnx7wvh42x7g24-bs0oo5axsh73cx90x6evvcuti 192.168.65.3:2377

To add a manager to this swarm, run 'docker swarm join-token manager' and follow the instructions.

(base) sarahaldrees@Sarahs-MacBook-Pro sarah201363 % docker stack deploy -c docker-compose.yml midterm2
Creating network midterm2_webnet
Creating service midterm2_web
(base) sarahaldrees@Sarahs-MacBook-Pro sarah201363 % docker service ls

```

ID	NAME	MODE	REPLICAS	IMAGE	PORTS
19kdsoe3dexh	midterm2_web	replicated	5/5	saldrees/sarah-201363:latest	*:8008->80/tcp

Q9:

Command: `python3 mqtt_sub.py`
`python3 mqtt_pub.py`

Screenshot:

```

sarah201363 -- -zsh -- 138x21
: non-zero exit (255)"
(base) sarahaldrees@Sarahs-MacBook-Pro sarah201363 % docker container ls -q
ae675af7ada0
3b98e937dcbf
(base) sarahaldrees@Sarahs-MacBook-Pro sarah201363 % docker swarm leave --force
Node left the swarm.
(base) sarahaldrees@Sarahs-MacBook-Pro sarah201363 % docker swarm init
Swarm initialized: current node (van2fe811vu3fj8doa5shpoj2) is now a manager.

To add a worker to this swarm, run the following command:

    docker swarm join --token SWMTKN-1-32820jga5pk949bcph3qkyd0p1ovmn0ekxo3xnx7wvh42x7g24-bs0oo5axsh73cx90x6evvcuti 192.168.65.3:2377

To add a manager to this swarm, run 'docker swarm join-token manager' and follow the instructions.

(base) sarahaldrees@Sarahs-MacBook-Pro sarah201363 % docker stack deploy -c docker-compose.yml midterm2
Creating network midterm2_webnet
Creating service midterm2_web
(base) sarahaldrees@Sarahs-MacBook-Pro sarah201363 % docker service ls

```

ID	NAME	MODE	REPLICAS	IMAGE	PORTS
19kdsoe3dexh	midterm2_web	replicated	5/5	saldrees/sarah-201363:latest	*:8008->80/tcp

```

Last login: Wed Nov 16 14:03:44 on tty000
/dev/fd/12:13: command not found: compdef
(base) sarahaldrees@Sarahs-MacBook-Pro ~ % cd Desktop
(base) sarahaldrees@Sarahs-MacBook-Pro Desktop % cd 561_443
(base) sarahaldrees@Sarahs-MacBook-Pro 561_443 % cd midterm
(base) sarahaldrees@Sarahs-MacBook-Pro midterm % python3 mqtt_pub.py
Connected successfully to 192.168.1.99
Published in saak3/midterm2, msg = { "StudentID": "201363", "Name": "Sarah", "Surname": "Aldrees", "Telephone": "0500000000", "Grade": 100}
(base) sarahaldrees@Sarahs-MacBook-Pro midterm % python3 mqtt_sub.py
Connected successfully to 192.168.1.99
Published in saak3/midterm2, msg = { "StudentID": "201363", "Name": "Sarah", "Surname": "Aldrees", "Telephone": "0500000000", "Grade": 100}
(base) sarahaldrees@Sarahs-MacBook-Pro midterm % python3 mqtt_pub.py
Connected successfully to 192.168.1.99
Published in saak3/midterm2, msg = { "StudentID": "201363", "Name": "Sarah", "Surname": "Aldrees", "Telephone": "0500000000", "Grade": 100}
(base) sarahaldrees@Sarahs-MacBook-Pro midterm %

```