Exercise 8

Commit and Push Containers

Q1.

Create a brand new container “my-con” using the latest httpd image.
Make sure to attach the port 80 of container to port 81 of your host machine.

Inside the container create the index.html at Document Root and the content “DEPLOYING MY OWN IMAGE”
Check the changes made.

Make sure that the webserver is working fine by doing curl on it.

Once verified, then commit the container to make a local image out of it. Once done tag the image in the conventional format and get the image ready to push the image to a registry server through your own personal account.

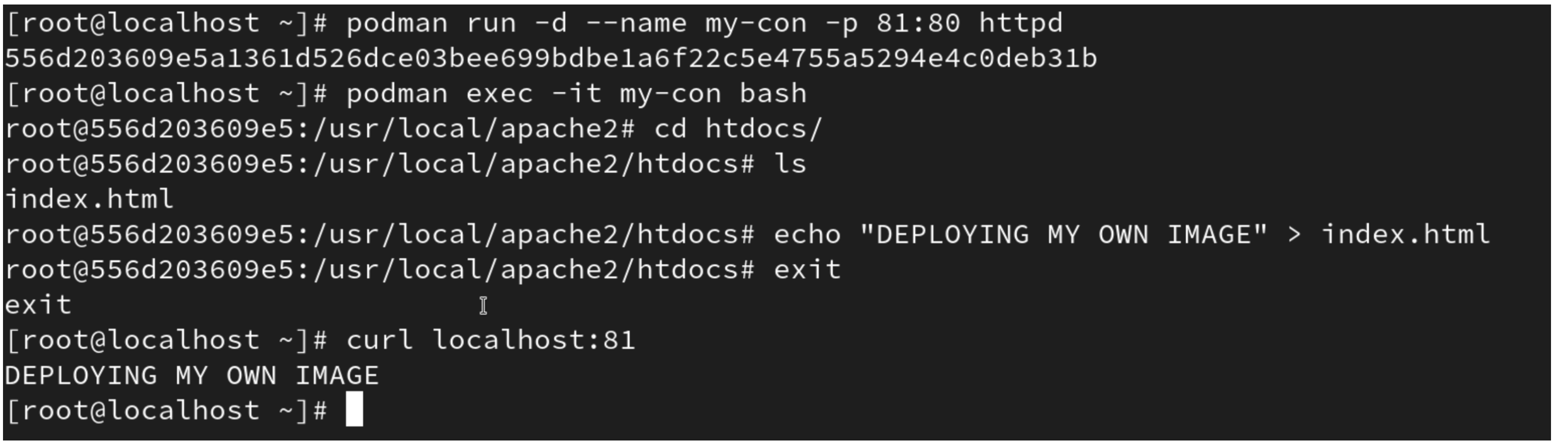
In this case you are going to push this image with name “my-webserver” and version as “2.0” onto your personal Docker account.

Once the image is pushed successfully.
Remove your container, delete the image already present in your local storage.
And now pull your image “my-webserver”.
Make a Container out of it, do assign the ports accordingly and simply doing a curl will result in the output as:

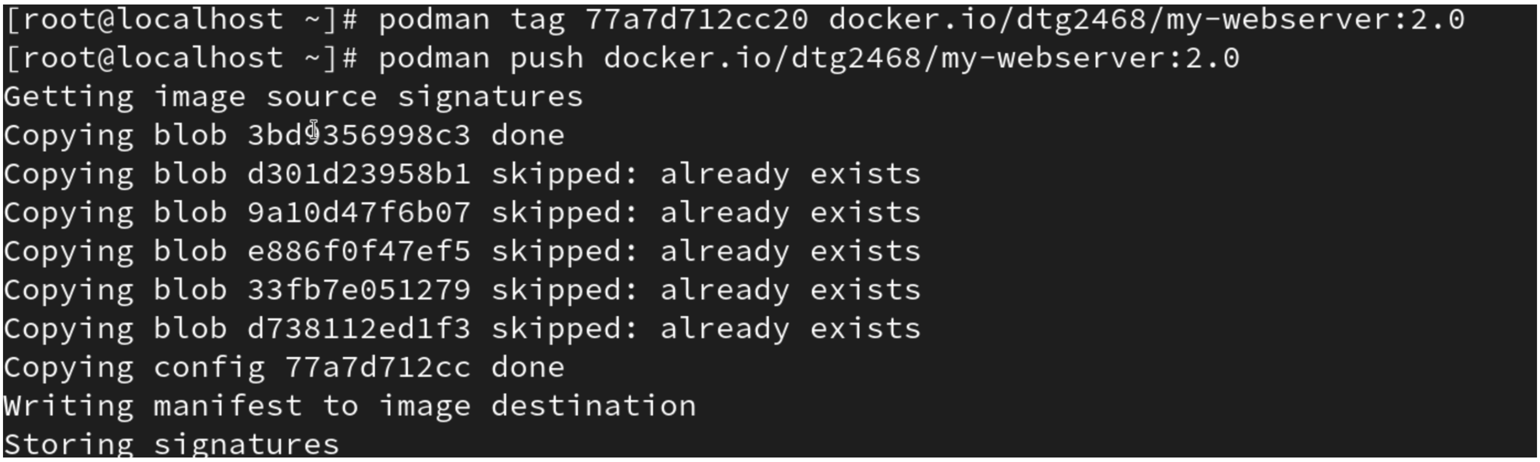
“DEPLOYING MY OWN IMAGE”

Solutions

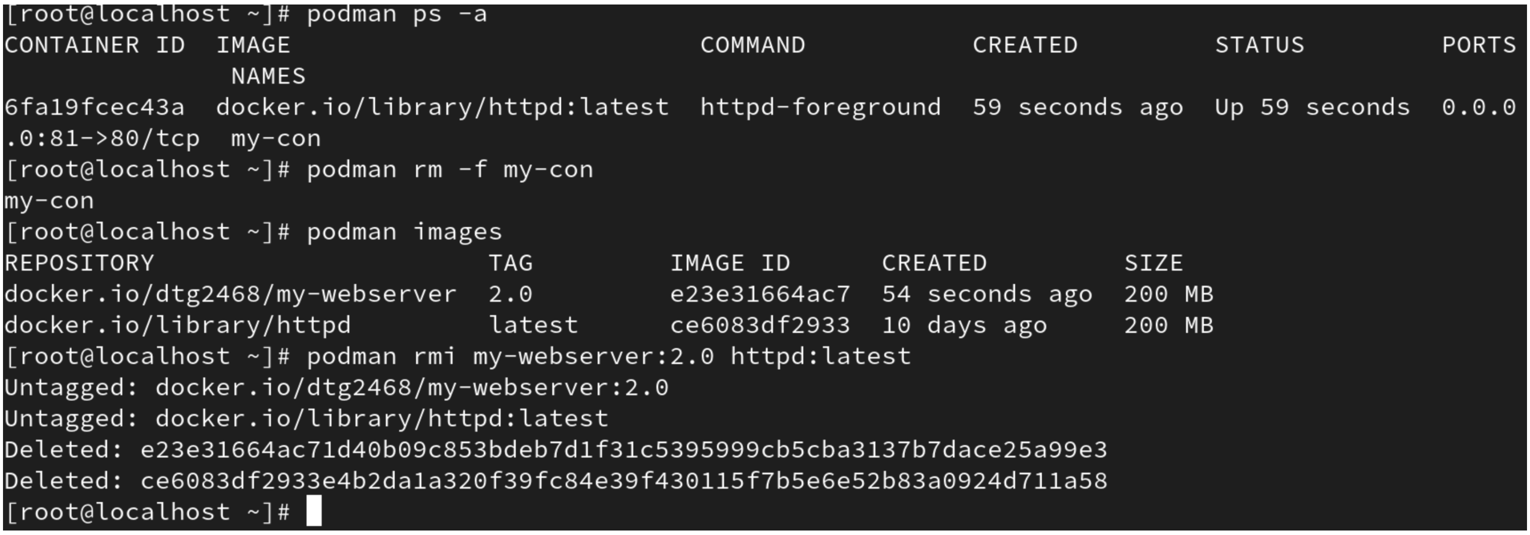
Q1.



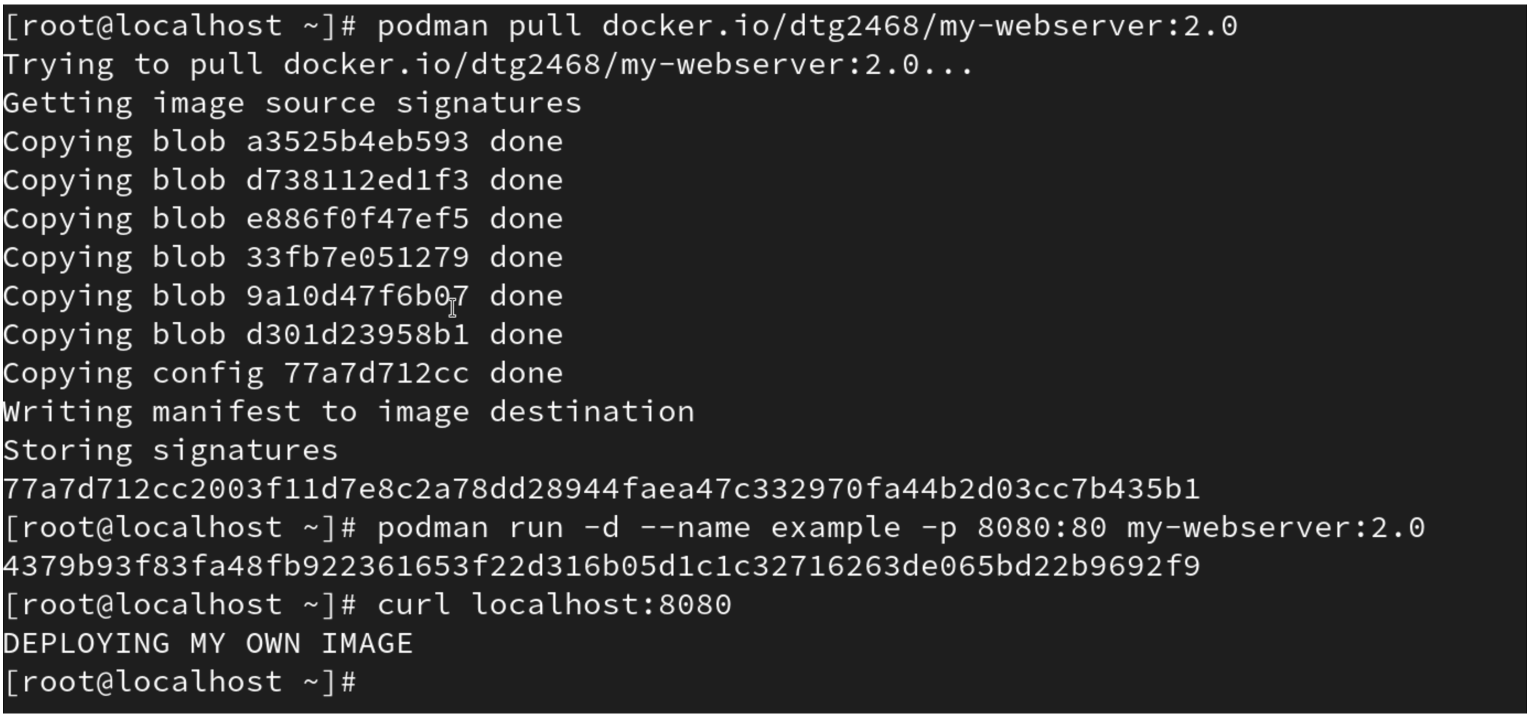
```
[root@localhost ~]# podman run -d --name my-con -p 81:80 httpd
556d203609e5a1361d526dce03bee699bdbe1a6f22c5e4755a5294e4c0deb31b
[root@localhost ~]# podman exec -it my-con bash
root@556d203609e5:/usr/local/apache2# cd htdocs/
root@556d203609e5:/usr/local/apache2/htdocs# ls
index.html
root@556d203609e5:/usr/local/apache2/htdocs# echo "DEPLOYING MY OWN IMAGE" > index.html
root@556d203609e5:/usr/local/apache2/htdocs# exit
exit
[root@localhost ~]# curl localhost:81
DEPLOYING MY OWN IMAGE
[root@localhost ~]#
```



```
[root@localhost ~]# podman tag 77a7d712cc20 docker.io/dtg2468/my-webserver:2.0
[root@localhost ~]# podman push docker.io/dtg2468/my-webserver:2.0
Getting image source signatures
Copying blob 3bd9356998c3 done
Copying blob d301d23958b1 skipped: already exists
Copying blob 9a10d47f6b07 skipped: already exists
Copying blob e886f0f47ef5 skipped: already exists
Copying blob 33fb7e051279 skipped: already exists
Copying blob d738112ed1f3 skipped: already exists
Copying config 77a7d712cc done
Writing manifest to image destination
Storing signatures
```



```
[root@localhost ~]# podman ps -a
CONTAINER ID  IMAGE                           COMMAND           CREATED         STATUS         PORTS
              NAMES
6fa19fcec43a  docker.io/library/httpd:latest  httpd-foreground  59 seconds ago  Up 59 seconds  0.0.0
.0:81->80/tcp  my-con
[root@localhost ~]# podman rm -f my-con
my-con
[root@localhost ~]# podman images
REPOSITORY                      TAG         IMAGE ID      CREATED         SIZE
docker.io/dtg2468/my-webserver  2.0         e23e31664ac7  54 seconds ago  200 MB
docker.io/library/httpd         latest      ce6083df2933  10 days ago     200 MB
[root@localhost ~]# podman rmi my-webserver:2.0 httpd:latest
Untagged: docker.io/dtg2468/my-webserver:2.0
Untagged: docker.io/library/httpd:latest
Deleted: e23e31664ac71d40b09c853bdeb7d1f31c5395999cb5cba3137b7dace25a99e3
Deleted: ce6083df2933e4b2da1a320f39fc84e39f430115f7b5e6e52b83a0924d711a58
[root@localhost ~]# 
```



```
[root@localhost ~]# podman pull docker.io/dtg2468/my-webserver:2.0
Trying to pull docker.io/dtg2468/my-webserver:2.0...
Getting image source signatures
Copying blob a3525b4eb593 done
Copying blob d738112ed1f3 done
Copying blob e886f0f47ef5 done
Copying blob 33fb7e051279 done
Copying blob 9a10d47f6b07 done
Copying blob d301d23958b1 done
Copying config 77a7d712cc done
Writing manifest to image destination
Storing signatures
77a7d712cc2003f11d7e8c2a78dd28944faea47c332970fa44b2d03cc7b435b1
[root@localhost ~]# podman run -d --name example -p 8080:80 my-webserver:2.0
4379b93f83fa48fb922361653f22d316b05d1c1c32716263de065bd22b9692f9
[root@localhost ~]# curl localhost:8080
DEPLOYING MY OWN IMAGE
[root@localhost ~]#
```