UPES

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UNIVERSITY OF PETROLEUM & ENERGY STUDIES

Dehradun

APPLICATION

CONTAINERIZATION

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Experiment-2

Docker Volume

Step-1: Run a docker image in interactive mode.

```
rakshit@rakshit-virtual-machine:~$ docker run -it alpine
Unable to find image 'alpine:latest' locally
latest: Pulling from library/alpine
4c0d98bf9879: Pull complete
Digest: sha256:08d6ca16c60fe7490c03d10dc339d9fd8ea67c6466dea8d558526b1330a85930
Status: Downloaded newer image for alpine:latest
/ # ls
bin     etc     lib     mnt     proc    run     srv     tmp     var
dev     home    media   opt     root    sbin    sys     usr
/ # cd mnt
/mnt # touch ab.txt
/mnt # touch a.txt
/mnt # ls
a.txt   ab.txt
/mnt # exit
```

Step-2: Check the status of the text file created in mnt directory of alpine image.

```
rakshit@rakshit-virtual-machine:~$ docker ps -a
CONTAINER ID   IMAGE         COMMAND      CREATED            STATUS                      PORTS     NAMES
a4aca3460e6c   alpine        "/bin/sh"    About a minute ago Exited (0) 14 seconds ago             charming_sinoussi
5f1d70f3aec9   hello-world   "/hello"     7 minutes ago      Exited (0) 7 minutes ago              hopeful_hawking
```

Step-3: Run containers with single attached volume with different container names and different images.

```
rakshit@rakshit-virtual-machine:~$ docker run -it -v myvol1:/mnt --name C1 alpine
/ # ls
bin      etc      lib      mnt      proc     run      srv      tmp      var
dev      home     media    opt      root     sbin     sys      usr
/ # cd mnt
/mnt # ls
/mnt # touch a.txt
/mnt # touch b.txt
/mnt # ls
a.txt  b.txt
/mnt # exit
rakshit@rakshit-virtual-machine:~$ docker ps -a
CONTAINER ID   IMAGE         COMMAND      CREATED            STATUS                     PORTS     NAMES
9afa8495c59b   alpine        "/bin/sh"    About a minute ago Exited (0) 11 seconds ago            C1
a4aca3460e6c   alpine        "/bin/sh"    5 minutes ago      Exited (0) 4 minutes ago             charming_sinoussi
5f1d70f3aec9   hello-world   "/hello"     11 minutes ago     Exited (0) 11 minutes ago            hopeful_hawking
rakshit@rakshit-virtual-machine:~$ docker run -it -v myvol1:/mnt --name C2 alpine
/ # cd mnt
/mnt # ls
a.txt  b.txt
/mnt # touch c.txt
/mnt # ls
a.txt  b.txt  c.txt
/mnt # exit
rakshit@rakshit-virtual-machine:~$
```

```
rakshit@rakshit-virtual-machine:~$ docker run -it -v myvol1:/var --name C3 ubuntu
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
83ee3a23efb7: Pull complete
db98fc6f11f0: Pull complete
f611acd52c6c: Pull complete
Digest: sha256:703218c0465075f4425e58fac086e09e1de5c340b12976ab9eb8ad26615c3715
Status: Downloaded newer image for ubuntu:latest
root@f757e86f6c4f:/# ls
bin  boot  dev  etc  home  lib  lib32  lib64  libx32  media  mnt  opt  proc  root  run  sbin  srv  sys  tmp  usr  var
root@f757e86f6c4f:/# cd var
root@f757e86f6c4f:/var# ls
a.txt  b.txt  c.txt
root@f757e86f6c4f:/var# touch d.txt
root@f757e86f6c4f:/var# ls
a.txt  b.txt  c.txt  d.txt
root@f757e86f6c4f:/var# exit
exit
rakshit@rakshit-virtual-machine:~$
```