

Experiment No. 8th exam

1. Aim: To understand Docker Architecture, install docker and execute docker commands

```
C:\Users\HP>docker --version
```

Docker version 20.10.24, build 297e128

```
C:\Users\HP>docker login
```

Authenticating with existing credentials...

Login Succeeded

Logging in with your password grants your terminal complete access to your account.

For better security, log in with a limited-privilege personal access token. Learn more at <https://docs.docker.com/go/access-tokens/>

```
C:\Users\HP>docker pull ubuntu
```

Using default tag: latest

latest: Pulling from library/ubuntu

Digest: sha256:67211c14fa74f070d27cc59d69a7fa9aeff8e28ea118ef3babc295a0428a6d21

Status: Image is up to date for ubuntu:latest

docker.io/library/ubuntu:latest

```
C:\Users\HP>docker run --name ubuntucontainer -it ubuntu
```

docker: Error response from daemon: Conflict. The container name "/ubuntucontainer" is already in use by container "88582b6adcdab18a8e18101db9f70fb5ad965eeab96265366003d3ece1679680". You have to remove (or rename) that container to be able to reuse that name.

See 'docker run --help'.

```
C:\Users\HP>docker run --name myubuntucontainer -it ubuntu -> change name of container
```

```
root@d76f168ba409:/# ls
```

```
bin dev home lib32 libx32 mnt proc run srv tmp var
```

```
boot etc lib lib64 media opt root sbin sys usr
```

```
root@d76f168ba409:/# cd tmp
```

```
root@d76f168ba409:/tmp# touch abc.txt
```

```
root@d76f168ba409:/tmp# touch xzy.txt
```

```
root@d76f168ba409:/tmp# touch ab.txt
```

```
root@d76f168ba409:/tmp# ls
```

```
ab.txt abc.txt xzy.txt
```

```
root@d76f168ba409:/tmp# exit
```

```
exit
```

```
C:\Users\HP>docker start myubuntucontainer
```

```
myubuntucontainer
```

```
C:\Users\HP>docker diff myubuntucontainer
```

```
C /root
```

```
A /root/.bash_history
```

```
C /tmp
```

```
A /tmp/ab.txt
```

```
A /tmp/abc.txt
```

```
A /tmp/xzy.txt
```

```
C:\Users\HP>docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
abhishek	latest	57ed24cb53c0	5 days ago	77.8MB
updateubuntuimage	latest	57ed24cb53c0	5 days ago	77.8MB
abhilitcode/abhishek	latest	57ed24cb53c0	5 days ago	77.8MB
abhilitcode	latest	57ed24cb53c0	5 days ago	77.8MB
ubuntu	latest	08d22c0ceb15	5 weeks ago	77.8MB

```
C:\Users\HP>docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
--------------	-------	---------	---------	--------	-------	-------

d76f168ba409 ubuntu "/bin/bash" 5 minutes ago Up About a minute
myubuntucontainer

C:\Users\HP>docker stop myubuntucontainer

myubuntucontainer

C:\Users\HP>docker ps

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
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C:\Users\HP>docker start myubuntucontainer

myubuntucontainer

C:\Users\HP>docker ps

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
d76f168ba409	ubuntu	"/bin/bash"	10 minutes ago	Up 10 seconds		myubuntucontainer

C:\Users\HP>docker commit myubuntucontainer updateubuntuimage →change name of image
sha256:5b9e1f59cbe7098e54b582dfa4ec9f1f3662947be57e432296ff13793b88c96b

C:\Users\HP>docker images

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
updateubuntuimage	latest	5b9e1f59cbe7	26 seconds ago	77.8MB
abhilitcode	latest	57ed24cb53c0	5 days ago	77.8MB
abhishek	latest	57ed24cb53c0	5 days ago	77.8MB
abhilitcode/abhishek	latest	57ed24cb53c0	5 days ago	77.8MB
ubuntu	latest	08d22c0ceb15	5 weeks ago	77.8MB

C:\Users\HP>docker tag abhishek:latest abhilitcode/abhishek:latest

Latest→ it is a tag so 1.0 dala toh bhi chlega

```
C:\Users\HP>docker push abhilitcode/abhishek:latest
```

The push refers to repository [docker.io/abhilitcode/abhishek]

f34a836a74be: Layer already exists

b93c1bd012ab: Layer already exists

latest: digest: sha256:243a1e4eb9918722fd0435092e95a1022658823446a62abd1611b36c8dd287af
size: 736