

```
#####  
#                               WARNING!!!!                               #  
# This is a sandbox environment. Using personal credentials             #  
# is HIGHLY! discouraged. Any consequences of doing so are              #  
# completely the user's responsibilities.                                #  
#                                                                         #  
# The PWD team.                                                          #  
#####
```

```
[node1] (local) root@192.168.0.28 ~
```

```
$ Gopal Kumar ^C
```

```
[node1] (local) root@192.168.0.28 ~
```

```
$ git clone https://github.com/dockersamples/linux_tweet_app
```

```
Cloning into 'linux_tweet_app'...
```

```
remote: Enumerating objects: 14, done.
```

```
remote: Counting objects: 100% (8/8), done.
```

```
remote: Compressing objects: 100% (4/4), done.
```

```
remote: Total 14 (delta 4), reused 4 (delta 4), pack-reused 6
```

```
Receiving objects: 100% (14/14), 10.79 KiB | 10.79 MiB/s, done.
```

```
Resolving deltas: 100% (5/5), done.
```

```
[node1] (local) root@192.168.0.28 ~
```

```
$ docker container run alpine hostname
```

```
Unable to find image 'alpine:latest' locally
```

```
latest: Pulling from library/alpine
```

```
latest: Pulling from library/alpine
31e352740f53: Pull complete
Digest: sha256:82d1e9d7ed48a7523bdebc18cf6290bdb97b82302a8a9c27d4fe885949ea94d1
Status: Downloaded newer image for alpine:latest
7cec5631a3f8
```

```
[node1] (local) root@192.168.0.28 ~
```

```
$ docker container ls --all
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
7cec5631a3f8	alpine	"hostname"	15 seconds ago	Exited (0) 14 seconds ago		romantic_spence

```
[node1] (local) root@192.168.0.28 ~
```

```
$ docker container run --interactive --tty --rm ubuntu bash
```

```
Unable to find image 'ubuntu:latest' locally
```

```
latest: Pulling from library/ubuntu
```

```
3153aa388d02: Pull complete
```

```
Digest: sha256:0bced47fffa3361afa981854fcabcd4577cd43cebbb808cea2b1f33a3dd7f508
```

```
Status: Downloaded newer image for ubuntu:latest
```

```
root@fc2485ffc6ba:/# ls /
```

bin	dev	home	lib32	libx32	mnt	proc	run	srv	tmp	var
boot	etc	lib	lib64	media	opt	root	sbin	sys	usr	

```
root@fc2485ffc6ba:/# ps aux
```

USER	PID	%CPU	%MEM	VSZ	RSS	TTY	STAT	START	TIME	COMMAND
root	1	0.4	0.0	4616	3856	pts/0	Ss	14:16	0:00	bash

```
root      9   0.0   0.0   7052  1608 pts/0    R+   14:16   0:00 ps aux
```

```
root@fc2485ffc6ba:/# cat /etc/issue
```

```
Ubuntu 22.04.2 LTS \n \l
```

```
root@fc2485ffc6ba:/# exit
```

```
exit
```

```
[node1] (local) root@192.168.0.28 ~
```

```
$ cat /etc/issue
```

```
Welcome to Alpine Linux 3.18
```

```
Kernel \r on an \m (\l)
```

```
[node1] (local) root@192.168.0.28 ~
```

```
$ docker container run \
```

```
> --detach \
```

```
> --name mydb \
```

```
> -e MYSQL_ROOT_PASSWORD=my-secret-pw \
```

```
> mysql:latest
```

```
Unable to find image 'mysql:latest' locally
```

```
latest: Pulling from library/mysql
```

```
e2c03c89dcad: Pull complete
```

```
68eb43837bf8: Pull complete
```

```
796892ddf5ac: Pull complete
```

```
latest: Pulling from library/mysql
e2c03c89dcad: Pull complete
68eb43837bf8: Pull complete
796892ddf5ac: Pull complete
6bca45eb31e1: Pull complete
ebb53bc0dcca: Pull complete
2e2c6bdc7a40: Pull complete
6f27b5c76970: Pull complete
438533a24810: Pull complete
e5bdf19985e0: Pull complete
667fa148337b: Pull complete
5baa702110e4: Pull complete
Digest: sha256:232936eb036d444045da2b87a90d48241c60b68b376caf509051cb6cffe6a6fdc
Status: Downloaded newer image for mysql:latest
a8158e9ed4da8b2b1a9eee2d2964abecf94740bc2cf18b91654ec6cbe3db7990
[node1] (local) root@192.168.0.28 ~
$ docker container logs ls
Error response from daemon: No such container: ls
[node1] (local) root@192.168.0.28 ~
$ ls
linux_tweet_app
[node1] (local) root@192.168.0.28 ~
```

linux\_tweet\_app

[node1] (local) root@192.168.0.28 ~

\$ docker container ls

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
a8158e9ed4da	mysql:latest	"docker-entrypoint.s..."	49 seconds ago	Up 47 seconds	3306/tcp, 33060/tcp	mydb

[node1] (local) root@192.168.0.28 ~

\$ docker container top mydb

PID	USER	TIME	COMMAND
1563	999	0:01	mysqld

[node1] (local) root@192.168.0.28 ~

\$ docker exec -it mydb \

> mysql --user=root --password=\$MYSQL\_ROOT\_PASSWORD --version

mysql: [Warning] Using a password on the command line interface can be insecure.

mysql Ver 8.0.33 for Linux on x86\_64 (MySQL Community Server - GPL)

[node1] (local) root@192.168.0.28 ~

\$ docker exec -it mydb sh

sh-4.4# mysql --user=root --password=\$MYSQL\_ROOT\_PASSWORD --version

mysql: [Warning] Using a password on the command line interface can be insecure.

mysql Ver 8.0.33 for Linux on x86\_64 (MySQL Community Server - GPL)

sh-4.4# exit

exit

[node1] (local) root@192.168.0.28 ~

exit

```
[node1] (local) root@192.168.0.28 ~
```

```
$ cd ~/linux_tweet_app
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ cat Dockerfile
```

```
FROM nginx:latest
```

```
COPY index.html /usr/share/nginx/html
```

```
COPY linux.png /usr/share/nginx/html
```

```
EXPOSE 80 443
```

```
CMD ["nginx", "-g", "daemon off;"]
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ echo $DOCKERID
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker image build --tag $DOCKERID/linux_tweet_app:1.0 .
```

```
[+] Building 0.0s (0/0)
```

```
ERROR: invalid tag "/linux_tweet_app:1.0": invalid reference format
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker image build
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
$ echo $DOCKERID
gopal7361
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
$ docker image build --tag $DOCKERID/linux_tweet_app:1.0 .
[+] Building 0.0s (0/0)
ERROR: invalid tag "/linux_tweet_app:1.0": invalid reference format
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
$ docker image build --tag $DOCKERID/linux_tweet_app:1.0 .
[+] Building 0.0s (0/0)
ERROR: invalid tag "/linux_tweet_app:1.0": invalid reference format
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
$ docker image build --tag $DOCKERID/linux_tweet_app:1.0 .
[+] Building 9.7s (8/8) FINISHED
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 186B 0.0s
=> [internal] load metadata for docker.io/library/nginx:latest 0.4s
=> [1/3] FROM docker.io/library/nginx:latest@sha256:08bc36ad52474e528c 9.0s
=> => resolve docker.io/library/nginx:latest@sha256:08bc36ad52474e528c 0.0s
=> => sha256:1bb5c4b86cb7c1e9f0209611dc2135d8a2c1c3a64 1.78kB / 1.78kB 0.0s
```

```
=> => sha256:1bb5c4b86cb7c1e9f0209611dc2135d8a2c1c3a64 1.78kB / 1.78kB 0.0s
=> => sha256:faef57eae888cbe4a5613eca6741b5e48d768b8 29.12MB / 29.12MB 0.4s
=> => sha256:cf707e2339551222cafe3bf835fddfb859f26bf59058b 625B / 625B 0.0s
=> => sha256:08bc36ad52474e528cc1ea3426b5e3f4bad8a1303 1.86kB / 1.86kB 0.0s
=> => sha256:021283c8eb95be02b23db0de7f609d603553c6714 8.15kB / 8.15kB 0.0s
=> => sha256:76579e9ed380849b4d22696f292770963b5ea91 41.46MB / 41.46MB 0.6s
=> => sha256:91bb7937700d7d3496cf43cb0012e5f818064fecb766b 959B / 959B 0.1s
=> => sha256:4b962717ba558b7dfabe88c40e20ac86844b132015b66 367B / 367B 0.2s
=> => sha256:f46d7b05649a846d7e24418b6ecea3b1efbdac88d 1.21kB / 1.21kB 0.2s
=> => sha256:103501419a0aecf94398ffcc7404f22931d9b89bb 1.41kB / 1.41kB 0.2s
=> => extracting sha256:faef57eae888cbe4a5613eca6741b5e48d768b83f60888 4.0s
=> => extracting sha256:76579e9ed380849b4d22696f292770963b5ea917a45ef7 3.4s
=> => extracting sha256:cf707e2339551222cafe3bf835fddfb859f26bf59058b3 0.0s
=> => extracting sha256:91bb7937700d7d3496cf43cb0012e5f818064fecb766bd 0.0s
=> => extracting sha256:4b962717ba558b7dfabe88c40e20ac86844b132015b660 0.0s
=> => extracting sha256:f46d7b05649a846d7e24418b6ecea3b1efbdac88d36163 0.0s
=> => extracting sha256:103501419a0aecf94398ffcc7404f22931d9b89bbb6021 0.0s
=> [internal] load build context 0.0s
=> => transferring context: 24.04kB 0.0s
=> [2/3] COPY index.html /usr/share/nginx/html 0.1s
=> [3/3] COPY linux.png /usr/share/nginx/html 0.1s
=> exporting to image 0.0s
```



```
=> exporting to image 0.0s
=> => exporting layers 0.0s
=> => writing image sha256:17d9dde439a4b179241b95685837e396f3718da640f 0.0s
=> => naming to docker.io/gopal7361/linux_tweet_app:1.0 0.0s
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker container run \
```

```
> --detach \
```

```
> --publish 80:80 \
```

```
> --name linux_tweet_app \
```

```
> $DOCKERID/linux_tweet_app:1.0
```

```
8c99485adc33f0103f1c9a2feb42752c4b40439631a2fd51a93b968de77ddaee
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker container rm --force linux_tweet_app
```

```
linux_tweet_app
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker container run \
```

```
> --deatch \
```

```
> --publiah 80:80 \
```

```
> --name linux_tweet_app \
```

```
> --mount type=bind,source="$(pwd)",target=/usr/share/nginx/html \
```

```
> $DOCKERID/linux_tweet_app:1.0
```

```
unknown flag: --deatch
```

unknown flag: --deatch

See 'docker container run --help'.

[node1] (local) root@192.168.0.28 ~/linux\_tweet\_app

```
$ docker container run --detach --publish 80:80 --name linux_tweet_app --mount type=bind,source="$(pwd)",target=/usr/share/nginx/html
$DOCKERID/linux_tweet_app:1.0
```

unknown flag: --publish

See 'docker container run --help'.

[node1] (local) root@192.168.0.28 ~/linux\_tweet\_app

```
$ docker container run --detach --publish 80:80 --name linux_tweet_app --mount type=bind,source="$(pwd)",target=/usr/share/nginx/html
$DOCKERID/linux_tweet_app:1.0
```

1012e95ac2240af688f20ffb32a6ab6864cb6d7d80a80d41cf7e1382adfb1f68

[node1] (local) root@192.168.0.28 ~/linux\_tweet\_app

```
$ cp index-new.html index.html
```

[node1] (local) root@192.168.0.28 ~/linux\_tweet\_app

```
$ docker rm --force linux_tweet_app
```

linux\_tweet\_app

[node1] (local) root@192.168.0.28 ~/linux\_tweet\_app

```
$ docker container run \
```

```
> --deatch \
```

```
> --publish 80:80 \
```

```
> --name linux_tweet_app \
```

```
> $DOCKERID/linux_tweet_app:1.0
```

```
> $DOCKERID/linux_tweet_app:1.0
unknown flag: --deatch
See 'docker container run --help'.
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
$ docker container run --detach --publish 80:80 --name linux_tweet_app $DOCKERID/linux_tweet_app:1.0
375f3b9034cb2efbbe42eb6933add6029bc1fabd688575120ade198c7cc8806f
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
$ docker rm --force linux_tweet_app
linux_tweet_app
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
$ docker image build --tag $DOCKERID/linux_tweet_app:2.0 .
[+] Building 0.6s (8/8) FINISHED
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 186B 0.0s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [internal] load metadata for docker.io/library/nginx:latest 0.2s
=> CACHED [1/3] FROM docker.io/library/nginx:latest@sha256:08bc36ad524 0.0s
=> [internal] load build context 0.0s
=> => transferring context: 1.74kB 0.0s
=> [2/3] COPY index.html /usr/share/nginx/html 0.1s
=> [3/3] COPY linux.png /usr/share/nginx/html 0.1s
```

```
=> [3/3] COPY linux.png /usr/share/nginx/html 0.1s
=> exporting to image 0.0s
=> => exporting layers 0.0s
=> => writing image sha256:a697379ad5bb5dba841a257923042a479bb7321d5e0 0.0s
=> => naming to docker.io/gopal7361/linux_tweet_app:2.0 0.0s
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker image ls
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
gopal7361/linux_tweet_app	2.0	a697379ad5bb	7 seconds ago	187MB
gopal7361/linux_tweet_app	1.0	17d9dde439a4	8 minutes ago	187MB
mysql	latest	041315a16183	12 days ago	565MB
ubuntu	latest	5a81c4b8502e	2 weeks ago	77.8MB
alpine	latest	c1aabb73d233	4 weeks ago	7.33MB

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker container run \
```

```
> --detach \
```

```
> --publish 80:80 \
```

```
> --name linux_tweet_app \
```

```
> $DOCKERID/linux_tweet_app:2.0
```

```
unknown flag: --detach
```

```
See 'docker container run --help'.
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

See 'docker container run --help'.

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker container run --detach --publish 80:80 --name linux_tweet_app $DOCKERID/linux_tweet_app:2.0
```

```
0da95d4ca345d0b8c1e4a5c16b923636b86f0182513fb53048b53a7ef6573996
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker container run \
```

```
> detach \
```

```
> publish 8080:80 \
```

```
> --name old_linux_tweet_app \
```

```
> ^C
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker container run \
```

```
> --detach \
```

```
> --publish 8080:80 \
```

```
> --name old_linux_tweet_app \
```

```
> $DOCKERID/linux_tweet_app:1.0
```

```
cb8e0ffa1da15991b44c098fcc8021e18720f131c0c97467c827cbb1bbc7aeae
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker image ls -f refrence="$DOCKERID/*"
```

```
Error response from daemon: invalid filter 'refrence'
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker image ls -f reference="$DOCKERID/*"
```

```
$ docker image ls -f reference="$DOCKERID/*"
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
gopal7361/linux_tweet_app	2.0	a697379ad5bb	4 minutes ago	187MB
gopal7361/linux_tweet_app	1.0	17d9dde439a4	12 minutes ago	187MB

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker login
```

Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to <https://hub.docker.com> to create one.

Username: gopal7361

Password:

WARNING! Your password will be stored unencrypted in /root/.docker/config.json.

Configure a credential helper to remove this warning. See

<https://docs.docker.com/engine/reference/commandline/login/#credentials-store>

Login Succeeded

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker image push $DOCKERID/linux_tweet_app:1.0
```

The push refers to repository [docker.io/gopal7361/linux\_tweet\_app]

7bfd8d2e43a6: Pushed

cccd4c7623d9: Pushed

3c9d04c9ebd5: Mounted from library/nginx

434c6a715c30: Mounted from library/nginx

```
434c6a715c30: Mounted from library/nginx
9fdfd12bc85b: Mounted from library/nginx
f36897eea34d: Mounted from library/nginx
1998c5cd2230: Mounted from library/nginx
b821d93f6666: Mounted from library/nginx
24839d45ca45: Mounted from library/nginx
1.0: digest: sha256:e5334068b6dd6b012bfff63b59730197ed4c23796d6ef81400526418c4e6dde50 size: 2193
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```

```
$ docker image push $DOCKERID/linux_tweet_app:2.0
```

```
The push refers to repository [docker.io/gopal7361/linux_tweet_app]
```

```
639205a538dc: Pushed
```

```
85f36ea821f1: Pushed
```

```
3c9d04c9ebd5: Layer already exists
```

```
434c6a715c30: Layer already exists
```

```
9fdfd12bc85b: Layer already exists
```

```
f36897eea34d: Layer already exists
```

```
1998c5cd2230: Layer already exists
```

```
b821d93f6666: Layer already exists
```

```
24839d45ca45: Layer already exists
```

```
write /var/lib/docker/image/overlay2/distribution/diffid-by-digest/sha256/.tmp-751803423ef56544c47816a472a5bfd7b1ed6453635afb8d352a327
```

```
3dc608d601195830940: no space left on device
```

```
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
```



```
1998c5cd2230: Mounted from library/nginx
b821d93f6666: Mounted from library/nginx
24839d45ca45: Mounted from library/nginx
1.0: digest: sha256:e5334068b6dd6b012bfff63b59730197ed4c23796d6ef81400526418c4e6dde50 size: 2193
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
$ docker image push $DOCKERID/linux_tweet_app:2.0
The push refers to repository [docker.io/gopal7361/linux_tweet_app]
639205a538dc: Pushed
85f36ea821f1: Pushed
3c9d04c9ebd5: Layer already exists
434c6a715c30: Layer already exists
9fdfd12bc85b: Layer already exists
f36897eea34d: Layer already exists
1998c5cd2230: Layer already exists
b821d93f6666: Layer already exists
24839d45ca45: Layer already exists
write /var/lib/docker/image/overlay2/distribution/diffid-by-digest/sha256/.tmp-751803423ef56544c47816a472a5bfd7b1ed6453635afb8d352a327
3dc608d601195830940: no space left on device
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
$ Gopal Kumar ^C
[node1] (local) root@192.168.0.28 ~/linux_tweet_app
$
```