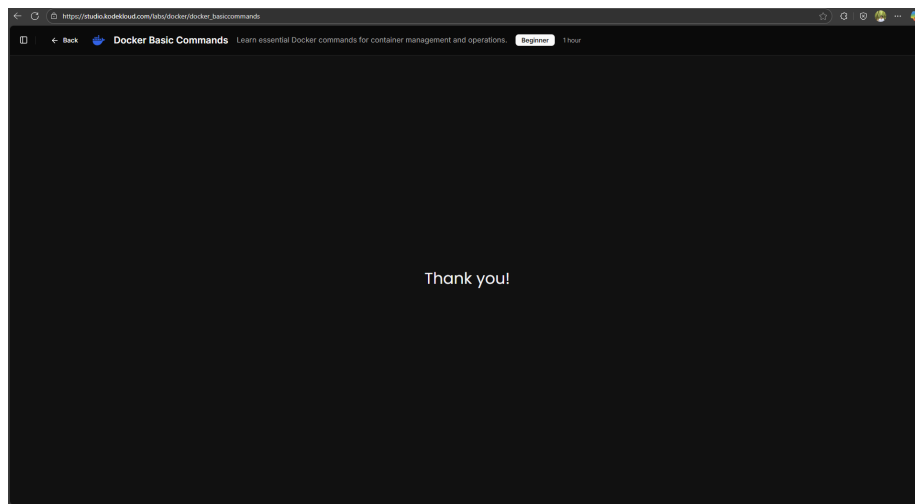


# DevOps Bootcamp, Docker

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## 1 Docker Basic Commands



## 2 Docker Run

```
~ → docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS
a4ebdbb474ea   nginx:alpine  "/docker-entrypoint..."  26 seconds ago  Up 22 seconds  0.0.0.0:3456->3456/tcp, :::3456->3456/tcp, 0.0.0.0:3030->80/tcp, :::3030->80/tcp  wizardly_benz

~ → docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
alpine        latest    91ef6a61f139   12 months ago  7.79MB
nginx         latest    c76d726a7d93   11 months ago  63.2MB
nginx        709c4ab4e1e1  11 months ago  100MB
postgres      latest    b701f3a53e61   11 months ago  432MB
ubuntu        latest    e8bf674c41f0   11 months ago  77MB
redis         latest    508a01f2fca1   11 months ago  13.9MB
mysql         latest    a62a8f1e2e10   14 months ago  589MB
kodecloud/simple-webapp-mysql  latest    12d0b9f67267   6 years ago    86.0MB
kodecloud/simple-webapp        latest    0c63c89a6c1e   6 years ago    84.2MB

~ → docker run -d -rm --name blue-app -p 3030:3030 kodecloud/simple-webapp:blue
Unable to find image 'kodecloud/simple-webapp:blue' locally
blue: Pulling from kodecloud/simple-webapp
4f02a5e6a8c: Already exists
7cfeaf6d2080: Already exists
f0b0a06a0495: Already exists
fac55da0a021: Already exists
a6fca0a0b7d1: Pull complete
f6ba0a0a0f0a: Pull complete
5a0a09f7a051: Pull complete
095a1a007c8b: Pull complete
Digest: sha256:9a0f1474f8c0b77c7a6b791bea0e5f6ca03d019a0a088bea03bc943fe5
Status: Downloaded newer image for kodecloud/simple-webapp:blue
3f1d0293f1d0966c32995a0c0eb0c03f1b18413919f8679b0d33650c2226173

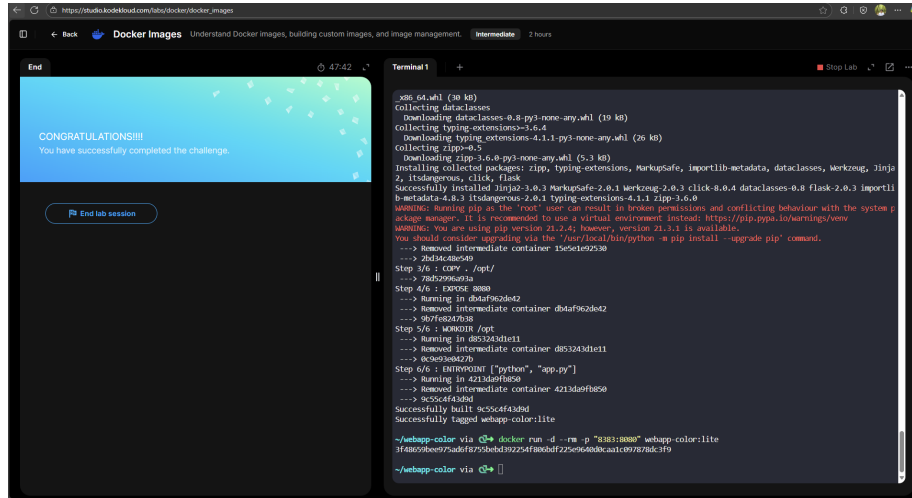
~ →
```

## 3 Docker Env Variables

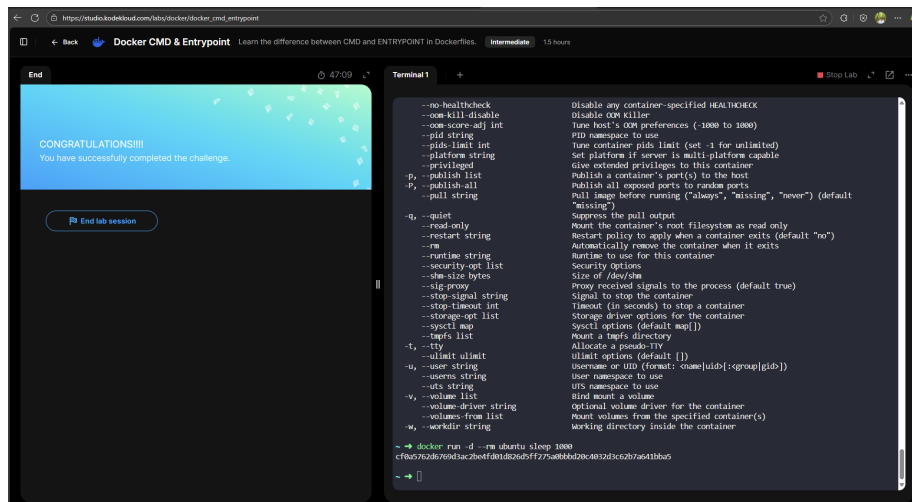
```
~ → docker run -d -rm --name blue-app -p 3030:3030 -e COLOR_FROM_ENV=blue kodecloud/simple-webapp:blue
/app # exit

~ →
```

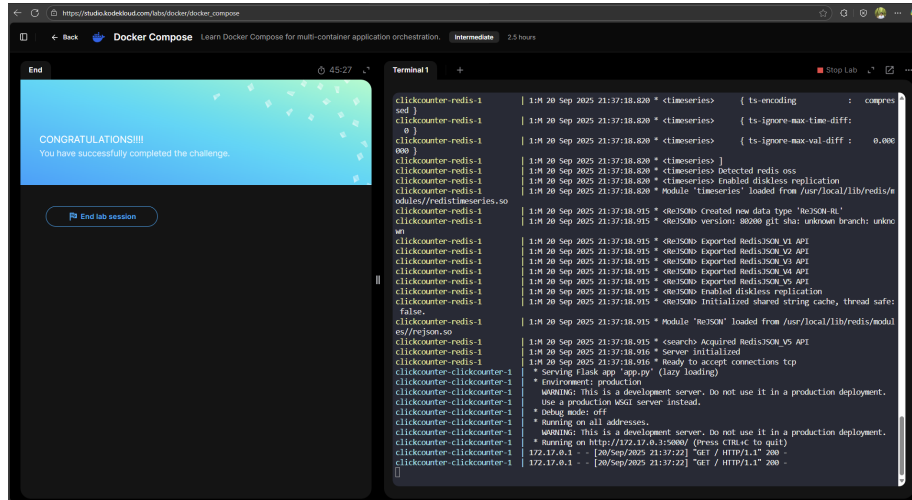
## 4 Docker Images



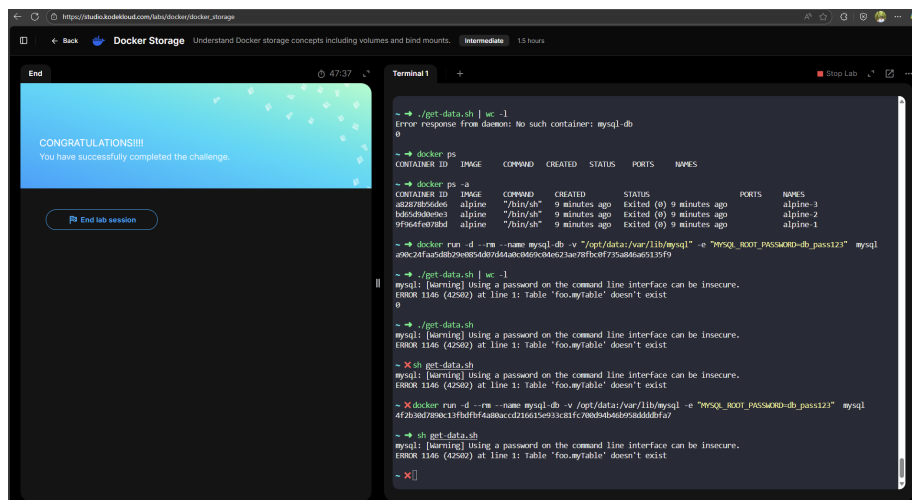
## 5 Docker CMD and Entrypoint



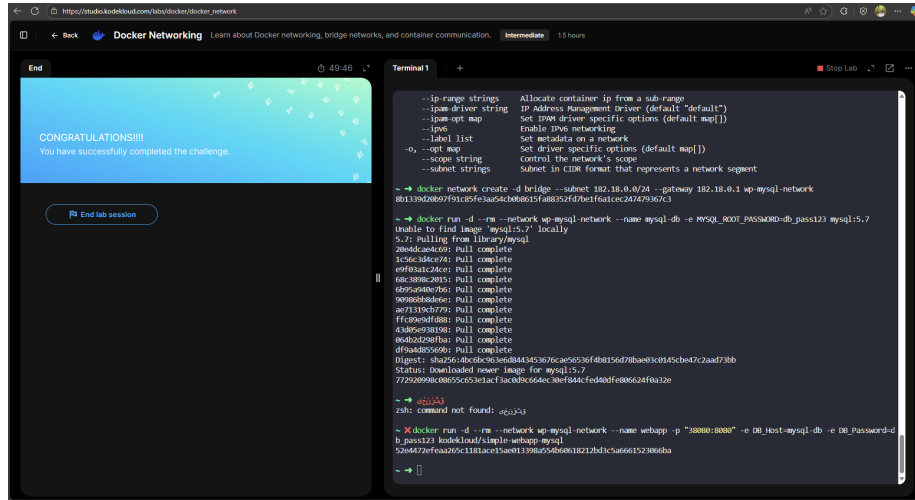
## 6 Docker Compose



## 7 Docker Storage



## 8 Docker Networking



```
--ip-range strings      Allocate container ip from a sub-range
--ipam-driver string    IP Address Management driver (default "default")
--ipam-opt map          Set IPAM driver specific options (default map[])
--ipv6                 Enable IPv6 networking
--label list            Set metadata on a network
--opt map              Set driver specific options (default map[])
--scope string          Control the network's scope
--subnet strings        Subnet in CIDR format that represents a network segment

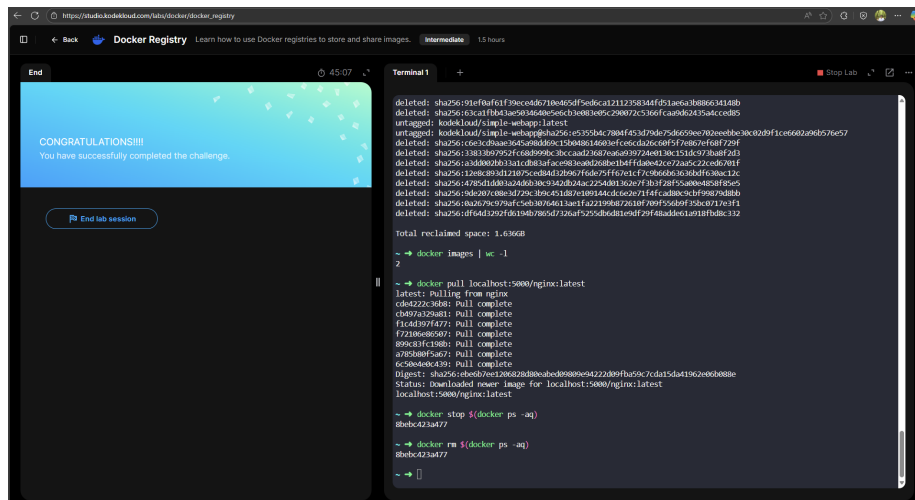
-> docker network create -d bridge --subnet 182.18.0.0/24 --gateway 182.18.0.1 wp-mysql-network
8b1336d069f91c45fe4a5dc08b605f40e32f4dbef16a1cc447479307c3

-> docker run -d --rm --network wp-mysql-network --name mysql-db -e MYSQL_ROOT_PASSWORD=pwsl23 mysql:5.7
Unable to find image 'mysql:5.7' locally
5.7: Pulling from library/mysql
206d2a0e1091: Pull complete
1c563d6ce941: Pull complete
e9f8a1c24ce1: Pull complete
6c389c2a9151: Pull complete
6895d40e7b61: Pull complete
90808d8d8d6e: Pull complete
a97338c8792e: Pull complete
ffc8e0edf488: Pull complete
43d0e5581b8e: Pull complete
9e0d02081ba1: Pull complete
df8ad856569b: Pull complete
Digest: sha256:4b6dc3630d8d4345367cae56736f4b156d78ba03c0145cbe87c2a8d73bb
Status: Downloaded newer image for mysql:5.7
779209998c0855c53e1acfac0d9c6d6c30ef84dcfed8dfc086624f0a12e

-> docker run -d --rm --network wp-mysql-network --name webapp -p "18000:8000" -e DB_HOST=mysql-db -e DB_PASSWORD=d
b_pawsl23 k0dekloud/simple-webapp:mysql
5204472efea205c1181ac15a081398a55d06018212d1c3a661523066ba

-> []
```

## 9 Docker Registry



```
deleted: sha256:91ef0a61f39cc0d6710e46d5f5edca12112358344fd51a6ea3b86634140b
deleted: sha256:163c1f1b43a56046405e5c33083085c290072c5166fca0bd62435atcced85
untagged: k0dekloud/simple-webapp:latest
deleted: sha256:16672b0e36f5a0499c12808818601efc0e4d3c0af9708d70f0f729f
deleted: sha256:19818697952fc08d9998c30caad236876ea0939240f10c1518c97b0af7d3
deleted: sha256:a3d802b13a1c0b1afac981ea0d20b1b1ff1d0a42ce72a5c22ced701f
deleted: sha256:120c8090112095ced04d22067f6d695f670e1fc49d6b010a0df30a11c
deleted: sha256:4785d1d83a246b30c9342b24ac2254d013e2e7f3b3f28f55800405f85e5
deleted: sha256:19d097c8e34729c309c45187c109144c4c6e207f4f1c0b8c0b99697d886
deleted: sha256:1a029c907c4f2c83076613a1c14221958f72d18f7091560f530c713e1f1
deleted: sha256:df64d3292f0d194b7895d7126af5225d6d81e0df29f4b4d6e1a918fdd8c332

Total reclaimed space: 1.636GB

-> docker images | wc -l
2

-> docker pull localhost:5000/nginx:latest
latest: pulling from nginx
c08422c30801: Pull complete
c0897a329a01: Pull complete
f1cdd39f477: Pull complete
f2210e69007: Pull complete
896c3ff1880: Pull complete
a78580f5a67: Pull complete
6c389c2a9151: Pull complete
Digest: sha256:1ebeb7ee120828d80acbd0880e9422209fba59c7cd15d41962e0d088e
Status: Downloaded newer image for localhost:5000/nginx:latest

-> docker stop $(docker ps -aq)
8bebc423a477

-> docker rm $(docker ps -aq)
8bebc423a477

-> []
```