



1. \$ docker image pull alpine
2. \$ docker image ls
3. \$ docker container run alpine ls -l
4. \$ docker container run alpine echo "help from alpine"
5. \$ docker container run alpine /bin/sh
6. \$ docker container run -it alpine /bin/sh
7. \$ docker container ls
8. \$ docker container ls -a
9. \$ docker container run -it alpine /bin/ash - - - 7 ~~Container~~
ISOLATION
Echo "hello world" > hello.txt
ls
exit
10. \$ docker container run alpine ls
11. This time we will start container which one we exited at point no. 9
\$ docker container start <container ID>
12. \$ docker container exec <container ID> ls
13. \$ docker run hello-world
14. \$ docker start <container-name>
15. \$ docker start --attach <container-name>
Analysis Command 14 and 15 both.
16. \$ docker run -it ubuntu bash
Run the below command
ps -ef
ls -al
In Another Terminal run below command
\$ docker top <container name>
17. \$ docker run alpine:latest "echo" "Hello, World"
18. \$ docker run -dit alpine sh
19. Comparison Alpine and Ubuntu/Debian size
a) time docker run --rm debian sh -c "apt-get update && apt-get install curl"
Output:
real 0m4.396s
user 0m0.029s
sys 0m0.021s
b) time docker run --rm alpine sh -c "apk update && apk add curl"

Analyze time to download the images and size the image.

20. Run Webserver Script from Docker run command

```
docker run -d --rm -p 8080:8080 --name webserver busybox \
  sh -c "while true; do { echo -e 'HTTP/1.1 200 OK\r\n'; \
  echo 'smallest http server'; } | nc -l -p 8080; done"
```

21.\$ Create Dockerfile

FROM ubuntu

MAINTAINER Admin

RUN apt-get update

CMD ["echo", "Hello World"]

Run Build command:

```
$ docker build -t myfirstImage .
```

```
$ docker run --name test myfirstImage
```

22.\$ docker run -it -p 80:80 nginx

23.\$ docker run -it -p 80:80 --name mynginx nginx

24.\$ docker exec -it mynginx bash

Inside the container:

```
# cd usr/share/nginx/html
```

```
# cat index.html
```

Edit the file or remove the file and create new one:

```
# cat >> index.html
```

```
*****
```

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
  <meta charset="utf-8">
```

```
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
```

```
  <title>Welcome</title>
```

```
  <meta name="viewport" content="width=device-width, initial-
  scale=1">
```

```
</head>
```

```
<body>
```

```
  <h1>Welcome!</h1>
```

```
<p>This file has been created on the host machine and has been  
mounted into the Nginx Docker Container!</p>  
</body>  
</html>
```

Hit the browser and run <http://localhost>

25. Another WAY:

Create Dockerfile

FROM nginx

COPY html /usr/share/nginx/html

```
$ docker build -t mynginx_image .
```

```
$ docker run --name mynginx -p 80:80 -d mynginx_image
```

26. Difference between Exec and Attach

```
$ docker container run --name my_nginx -d -p 8080:80 nginx
```

```
$ docker container attach my_nginx
```

```
$ docker logs my_nginx
```

\$ CTRL-p CTRL-q key combination to Detach And Ctrl-c Stops the container

```
$ docker container run --name my_mysql -d mysql
```

```
$ docker container exec -it my_mysql ls /var
```

```
$ docker container exec -it my_mysql /bin/bash
```

Take Away:

The docker exec and docker attach commands allow you to connect to a running container. To get an interactive shell to a container, use the exec command to start a new shell session. The attach command attaches your terminal to a running container.

27. Daemonized Container

```
$ docker run --name my_daemonized -d ubuntu /bin/sh -c "while true; do  
echo my daemonized container; sleep 1; done "
```

```
$ docker logs
```