

```
ubuntu@ip-172-31-47-216: ~$ docker build -t assign5img:latest .
Install the buildx component to build images with BuildKit:
https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 13.31kB
Step 1/4 : FROM ubuntu:latest
--> 61b2756d6fa9
Step 2/4 : RUN apt-get update && apt-get install -y apache2
--> Using cache
--> 98e0b0f21186
Step 3/4 : CMD ["apache2ctl", "-D", "FOREGROUND"]
--> Using cache
--> 7e044a1cae19
Step 4/4 : EXPOSE 80
--> Using cache
--> fb85488dc1e9
Successfully built fb85488dc1e9
Successfully tagged assign5img:latest
ubuntu@ip-172-31-47-216:~$ docker image ls
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
assign5img           latest             fb85488dc1e9        53 seconds ago     225MB
assign5img           latest             fb85488dc1e9        53 seconds ago     225MB
venkatesh1503/assignment3-image latest             64d5095608b6        49 minutes ago     225MB
ubuntu               latest             61b2756d6fa9        2 weeks ago        78.1MB

ubuntu@ip-172-31-47-216:~$ docker rm assign5img
Error response from daemon: No such container: assign5img
ubuntu@ip-172-31-47-216:~$ docker image rm assign5img
Untagged: assign5img:latest
ubuntu@ip-172-31-47-216:~$ docker image ls
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
assign5img           latest             fb85488dc1e9        About a minute ago 225MB
venkatesh1503/assignment3-image latest             64d5095608b6        50 minutes ago     225MB
ubuntu               latest             61b2756d6fa9        2 weeks ago        78.1MB

ubuntu@ip-172-31-47-216:~$ docker run -itd assign5img
f5258015c188a43e29b72a824ae2d665972a098d4b80b472c2d9d01239bc3e1
ubuntu@ip-172-31-47-216:~$ docker ps
CONTAINER ID        IMAGE               COMMAND                  CREATED              STATUS              PORTS              NAMES
f5258015c188      assign5img         "apache2ctl -D FOREG..." 6 seconds ago       Up 4 seconds       80/tcp             inspiring_banzai
cbb3046828d       venkatesh1503/assignment3-image "/bin/bash"            15 minutes ago      Up 15 minutes      0.0.0.0:80->80/tcp, :::80->80/tcp suspicious_buck
```

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ubuntu@ip-172-31-47-216: ~$ docker --help
history      Show the history of an image
import       Import the contents from a tarball to create a filesystem image
inspect      Return low-level information on Docker objects
kill         Kill one or more running containers
load         Load an image from a tar archive or STDIN
logs         Fetch the logs of a container
pause        Pause all processes within one or more containers
port         List port mappings or a specific mapping for the container
rename       Rename a container
restart      Restart one or more containers
rm           Remove one or more containers
rmi          Remove one or more images
save         Save one or more images to a tar archive (streamed to STDOUT by default)
start        Start one or more stopped containers
stats        Display a live stream of container(s) resource usage statistics
stop         Stop one or more running containers
tag          Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE
top          Display the running processes of a container
unpause      Unpause all processes within one or more containers
update       Update configuration of one or more containers
wait         Block until one or more containers stop, then print their exit codes

Global Options:
--config string      Location of client config files (default "/home/ubuntu/.docker")
-c, --context string Name of the context to use to connect to the daemon (overrides DOCKER_HOST env var and default context set with "docker context use")
-D, --debug           Enable debug mode
-H, --host list       Daemon socket to connect to
-l, --log-level string Set the logging level ("debug", "info", "warn", "error", "fatal") (default "info")
--tls                Use TLS; implied by --tlsverify
--tlscacert string   Trust certs signed only by this CA (default "/home/ubuntu/.docker/ca.pem")
--tlscert string     Path to TLS certificate file (default "/home/ubuntu/.docker/cert.pem")
--tlskey string      Path to TLS key file (default "/home/ubuntu/.docker/key.pem")
--tlsverify          Use TLS and verify the remote
-v, --version         Print version information and quit

Run 'docker COMMAND --help' for more information on a command.

For more help on how to use Docker, head to https://docs.docker.com/go/guides/

ubuntu@ip-172-31-47-216:~$ docker rm -f cbb3046828d
cbb3046828d
ubuntu@ip-172-31-47-216:~$ docker ps
CONTAINER ID        IMAGE               COMMAND                  CREATED              STATUS              PORTS              NAMES
f5258015c188      assign5img         "apache2ctl -D FOREG..." About a minute ago   Up About a minute   80/tcp             inspiring_banzai
ubuntu@ip-172-31-47-216:~$
```

```
root@f5258015c188: /
logs      Fetch the logs of a container
pause     Pause all processes within one or more containers
port      List port mappings or a specific mapping for the container
rename    Rename a container
restart   Restart one or more containers
rm        Remove one or more containers
rmi       Remove one or more images
save      Save one or more images to a tar archive (streamed to STDOUT by default)
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--tls               Use TLS; implied by --tlsverify
--tlscacert string   Trust certs signed only by this CA (default "/home/ubuntu/.docker/ca.pem")
--tlscert string     Path to TLS certificate file (default "/home/ubuntu/.docker/cert.pem")
--tlskey string      Path to TLS key file (default "/home/ubuntu/.docker/key.pem")
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ubuntu@ip-172-31-47-216:~$ docker rm -f cbbe3946828d
cbbe3946828d
ubuntu@ip-172-31-47-216:~$ docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS   NAMES
f5258015c188   assign4img "apache2ctl -D FOREG..." About a minute ago Up About a minute 80/tcp   inspiring_banzai
ubuntu@ip-172-31-47-216:~$ docker exec -it f5258015c188 /bin/bash
root@f5258015c188:/# service aaache2 status
aaache2: unrecognized service
root@f5258015c188:/# service apache2 status
* apache2 is running
root@f5258015c188:/#
```

sudo nano Dockerfile

docker build . -t assign4img

docker run -itd assign4img

docker ps

docker exec -it f5258015c188 /bin/bash

Inside Container

service apache2 status

Dockerfile

Use the official Ubuntu base image

FROM ubuntu:latest

Update the package list and install Apache2

RUN apt-get update && apt-get install -y apache2

Ensure Apache runs in the foreground

CMD ["apache2ctl", "-D", "FOREGROUND"]

Expose port 80 to the host

EXPOSE 80