# Module 6: Containerization With Docker

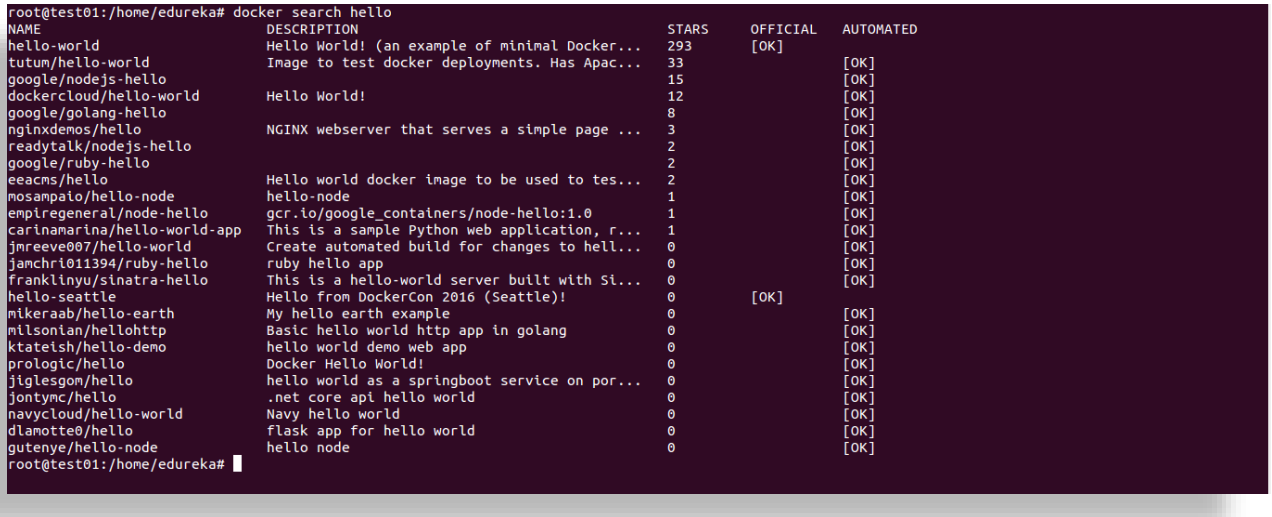
## Demo Document



edureka!

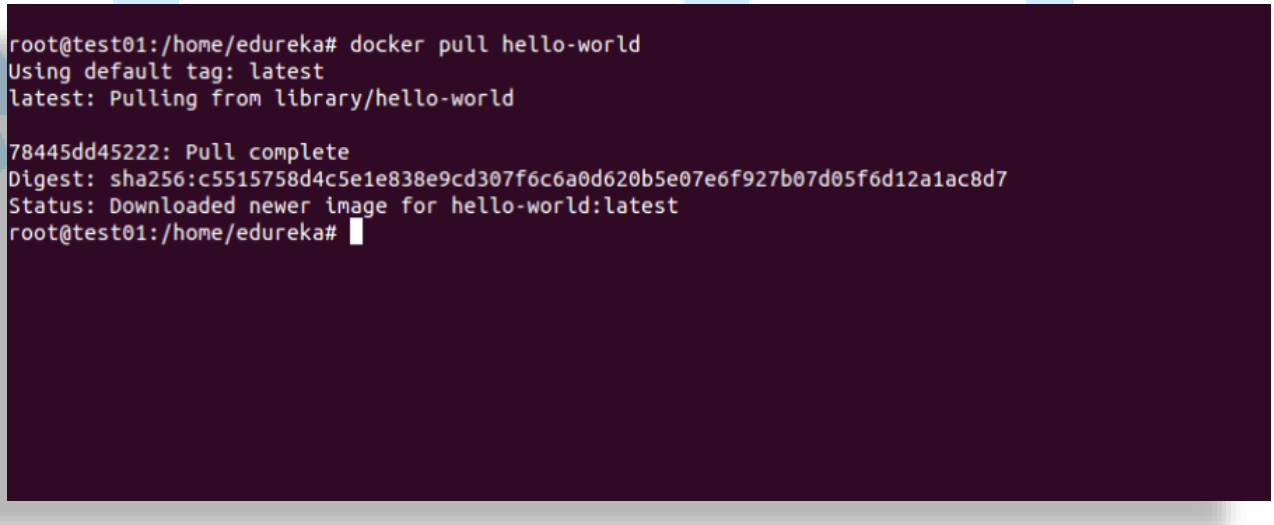
# Demo – 1: Running Hello World In Docker

- Search Hello World



```
root@test01:/home/edureka# docker search hello
NAME                              DESCRIPTION                                     STARS     OFFICIAL   AUTOMATED
hello-world                       Hello World! (an example of minimal Docker...   293       [OK]
tutum/hello-world                 Image to test docker deployments. Has Apac...   33                   [OK]
google/nodejs-hello                                                               15                   [OK]
dockercloud/hello-world           Hello World!                                    12                   [OK]
google/golang-hello                                                               8                    [OK]
nginxdemos/hello                  NGINX webserver that serves a simple page ...   3                    [OK]
readytalk/nodejs-hello                                                            2                    [OK]
google/ruby-hello                                                                 2                    [OK]
eeacms/hello                      Hello world docker image to be used to tes...   2                    [OK]
mosampaio/hello-node              hello-node                                      1                    [OK]
empiregeneral/node-hello          gcr.io/google_containers/node-hello:1.0         1                    [OK]
carinamarina/hello-world-app      This is a sample Python web application, r...   1                    [OK]
jmreeve007/hello-world            Create automated build for changes to hell...   0                    [OK]
jamchri011394/ruby-hello          ruby hello app                                  0                    [OK]
franklinyu/sinatra-hello          This is a hello-world server built with Si...   0                    [OK]
hello-seattle                     Hello from DockerCon 2016 (Seattle)!            0         [OK]
mikeraab/hello-earth              My hello earth example                          0                    [OK]
milsonian/hellohttp               Basic hello world http app in golang            0                    [OK]
ktateish/hello-demo               hello world demo web app                        0                    [OK]
prologic/hello                    Docker Hello World!                             0                    [OK]
jiglesgom/hello                   hello world as a springboot service on por...   0                    [OK]
jontymc/hello                     .net core api hello world                       0                    [OK]
navycloud/hello-world             Navy hello world                                0                    [OK]
dlamotte0/hello                   flask app for hello world                       0                    [OK]
gutenye/hello-node                hello node                                      0                    [OK]
root@test01:/home/edureka#
```

- Pull Hello World from Docker Hub



```
root@test01:/home/edureka# docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world

78445dd45222: Pull complete
Digest: sha256:c5515758d4c5e1e838e9cd307f6c6a0d620b5e07e6f927b07d05f6d12a1ac8d7
Status: Downloaded newer image for hello-world:latest
root@test01:/home/edureka#
```

- Run Hello World

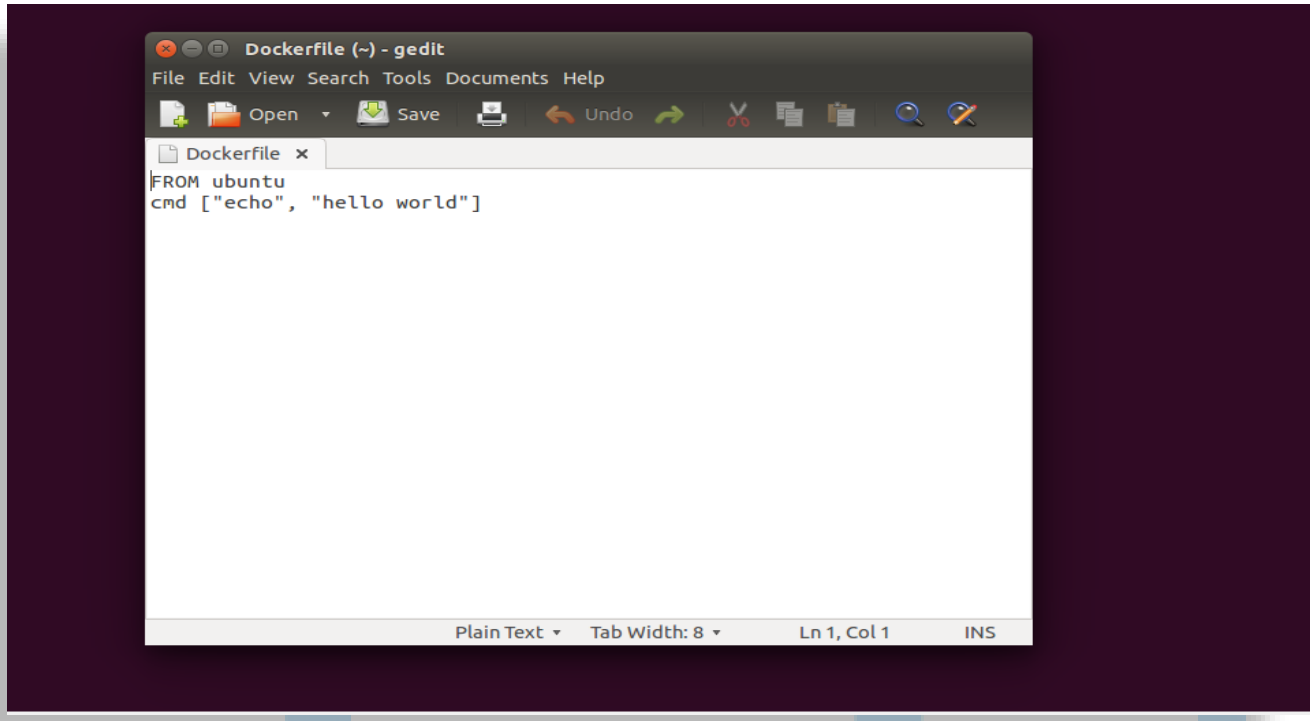
```
root@test01:~# docker run hello-world

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
 $ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
 https://cloud.docker.com/

For more examples and ideas, visit:
 https://docs.docker.com/engine/userguide/

root@test01:~#
```

## Demo – 2: Create & Build Docker File

- Creating an empty file

```
root@test01:~# touch Dockerfile
root@test01:~# gedit Dockerfile
```

- Editing the file




- Building the Docker file

```
root@test01:~# gedit Dockerfile
root@test01:~# docker build .
Sending build context to Docker daemon   513 kB
Step 1 : FROM ubuntu
 ---> 4ca3a192ff2a
Step 2 : CMD echo hello world
 ---> Running in 876177664b4f
 ---> 7c226dc91bb2
Removing intermediate container 876177664b4f
Successfully built 7c226dc91bb2
root@test01:~#
```

```
root@test01:~# docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
<none>              <none>              7c226dc91bb2        8 minutes ago       128.2 MB
hello-world         latest              48b5124b2768        3 months ago        1.84 kB
ubuntu              latest              4ca3a192ff2a        4 months ago        128.2 MB
root@test01:~#
```