

1. Docker install on wsl.

```
root@vishalpc:~# exit
exit
root@vishalpc:/home/vishal# exit
exit
vishal@vishalpc:~$ su -
Password:
root@vishalpc:~# docker --version
Docker version 28.5.2, build ecc6942
root@vishalpc:~# mkdir Docker_tasks
```

- 19.** Run four HTTPD Docker containers with distinct, meaningful names, and apply restart policies (NO, On-Failure, Always, and Unless-Stopped) to each of the four containers, respectively. Demonstrate that the restart policies function as expected.

Container1 with restart_no policy

```
root@vishalpc:~/Docker_tasks# docker run -d --name web01_no -p 8080:80 --restart no httpd
Unable to find image 'httpd:latest' locally
latest: Pulling from library/httpd
d7ecded7702a: Already exists
fab98c44430d: Pull complete
4f4fb700ef54: Pull complete
13c22d886563: Pull complete
4870f70a8556: Pull complete
233dec01418c: Pull complete
Digest: sha256:ecfd5ca1bfef1fc5e44a5836c518bde7f397b50c7a5bb603a017543e29948a01
Status: Downloaded newer image for httpd:latest
1a3f0ba24450afdbc12eb6aa2b571823bf815b1fe91a3f2b0b26bec9022a5acd
root@vishalpc:~/Docker_tasks# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
1a3f0ba24450 httpd "httpd-foreground" 10 seconds ago Up 9 seconds 0.0.0.0:8080->80/tcp, [::]:8080->80/tcp web01_no
root@vishalpc:~/Docker_tasks# docker inspect web01_no
[
  {
    "Id": "1a3f0ba24450afdbc12eb6aa2b571823bf815b1fe91a3f2b0b26bec9022a5acd",
    "Created": "2025-11-06T05:12:28.993742014Z",
    "Path": "httpd-foreground",
    "Args": [],
    "State": {
      "Status": "running",
      "Running": true,
      "Paused": false,
      "Restarting": false,
      "OOMKilled": false,
      "Dead": false,
      "Pid": 10888,
      "ExitCode": 0,
      "Error": ""
    }
  }
]
```

Container1 with restart onfailure policy

```
        "Config": {},
      },
      "NetworkMode": "bridge",
      "PortBindings": {
        "80/tcp": [
          {
            "HostIp": "",
            "HostPort": "8081"
          }
        ]
      },
      "RestartPolicy": {
        "Name": "on-failure",
        "MaximumRetryCount": 0
      },
      "AutoRemove": false,
      "VolumeDriver": "",
      "VolumesFrom": null,
      "ConsoleSize": [
        41,
        156
      ]
    }
  ]
```

```

root@vishalpc:~/Docker_tasks#
root@vishalpc:~/Docker_tasks#
root@vishalpc:~/Docker_tasks# docker run -d --name appserver_onfailure -p 8081:80 --restart on-failure httpd
f40f37fdae7904686d1391f64e4a90d6c761337fe16137893e86d455728faef8
root@vishalpc:~/Docker_tasks# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
f40f37fdae79 httpd "httpd-foreground" 5 seconds ago Up 4 seconds 0.0.0.0:8081->80/tcp, [::]:8081->80/tcp appserver_onfailure
1a3f0ba24450 httpd "httpd-foreground" 4 minutes ago Up 4 minutes 0.0.0.0:8080->80/tcp, [::]:8080->80/tcp web01_no
root@vishalpc:~/Docker_tasks# docker inspect appserver_onfailure
[
  {
    "Id": "f40f37fdae7904686d1391f64e4a90d6c761337fe16137893e86d455728faef8",
    "Created": "2025-11-06T05:16:49.760682656Z",
    "Path": "httpd-foreground",
    "Args": [],
    "State": {
      "Status": "running",
      "Running": true,
      "Paused": false,
      "Restarting": false,
      "OOMKilled": false,
      "Dead": false,
      "Pid": 11222
    }
  }
]

```

```

root@vishalpc:~/Docker_tasks# docker run -d --name db_always -p 8083:80 --restart always httpd
920b3bca6ed7e0d490888cdedd97092aec923c93dc9a75f4896193502bd860f5
root@vishalpc:~/Docker_tasks# docker run -d --name local_unless_stopped -p 8084:80 --restart unless-stopped httpd
a3919ab44dded9629014cef3b42ab9d7a865703216cc6a7b3f8e477dbbee193
root@vishalpc:~/Docker_tasks# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
a3919ab44dde httpd "httpd-foreground" 6 seconds ago Up 5 seconds 0.0.0.0:8084->80/tcp, [::]:8084->80/tcp local_unless-stopped
920b3bca6ed7 httpd "httpd-foreground" 50 seconds ago Up 50 seconds 0.0.0.0:8083->80/tcp, [::]:8083->80/tcp db_always
f40f37fdae79 httpd "httpd-foreground" 9 minutes ago Up 9 minutes 0.0.0.0:8081->80/tcp, [::]:8081->80/tcp appserver_onfailure
1a3f0ba24450 httpd "httpd-foreground" 13 minutes ago Up 13 minutes 0.0.0.0:8080->80/tcp, [::]:8080->80/tcp web01_no
root@vishalpc:~/Docker_tasks#
root@vishalpc:~/Docker_tasks#
root@vishalpc:~/Docker_tasks#

```

20. Change the restart policy of a above running container from the default to a custom policy using the docker update command. e.g. docker update --help

```

root@vishalpc:~/Docker_tasks# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
a3919ab44dde httpd "httpd-foreground" 8 minutes ago Up 8 minutes 0.0.0.0:8084->80/tcp, [::]:8084->80/tcp local_unless-stopped
920b3bca6ed7 httpd "httpd-foreground" 8 minutes ago Up 8 minutes 0.0.0.0:8083->80/tcp, [::]:8083->80/tcp db_always
f40f37fdae79 httpd "httpd-foreground" 17 minutes ago Up 17 minutes 0.0.0.0:8081->80/tcp, [::]:8081->80/tcp appserver_onfailure
1a3f0ba24450 httpd "httpd-foreground" 21 minutes ago Up 21 minutes 0.0.0.0:8080->80/tcp, [::]:8080->80/tcp web01_no
root@vishalpc:~/Docker_tasks# docker update --restart=always web01_no
root@vishalpc:~/Docker_tasks# docker inspect web01_no
[
  {
    "Id": "1a3f0ba24450afdbc12eb6aa2b571823bf815b1fe91a3f2b0b26bec9022a5acd",
    "Created": "2025-11-06T05:12:28.993742014Z",
    "Path": "httpd-foreground",
    "Args": [],
    "State": {
      "Status": "running",
      "Running": true,
      "Paused": false,
      "Restarting": false,
      "OOMKilled": false,
      "Dead": false,
      "Pid": 10888,
      "ExitCode": 0,
      "Error": "",
      "StartedAt": "2025-11-06T05:12:29.289909647Z",
      "FinishedAt": "2000-01-01T00:00:00Z"
    },
    "Image": "sha256:6a4fe18d08d26a61b32d6aa5d17b2417c4f4de63e8460abf4cd824b911b9de88",
    "ResolvConfPath": "/var/lib/docker/containers/1a3f0ba24450afdbc12eb6aa2b571823bf815b1fe91a3f2b0b26bec9022a5acd/resolv.conf",
    "HostnamePath": "/var/lib/docker/containers/1a3f0ba24450afdbc12eb6aa2b571823bf815b1fe91a3f2b0b26bec9022a5acd/hostname",
    "HostsPath": "/var/lib/docker/containers/1a3f0ba24450afdbc12eb6aa2b571823bf815b1fe91a3f2b0b26bec9022a5acd/hosts",
    "LogPath": "/var/lib/docker/containers/1a3f0ba24450afdbc12eb6aa2b571823bf815b1fe91a3f2b0b26bec9022a5acd/1a3f0ba24450afdbc12eb6aa2b571823bf815b1fe91a3f2b0b26bec9022a5acd-log",
    "Name": "/web01_no",
    "RestartCount": 0,
    "Driver": "overlay2",
    "Platform": "linux",
    "MountLabel": ""
  }
]

```

```

"AppArmorProfile": "",
"ExecIDs": null,
"HostConfig": {
    "Binds": null,
    "ContainerIDFile": "",
    "LogConfig": {
        "Type": "json-file",
        "Config": {}
    },
    "NetworkMode": "bridge",
    "PortBindings": {
        "80/tcp": [
            {
                "HostIp": "",
                "HostPort": "8080"
            }
        ]
    },
    "RestartPolicy": {
        "Name": "always",
        "MaximumRetryCount": 0
    },
    "AutoRemove": false,
    "VolumeDriver": "",
    "VolumesFrom": null,
    "ConsoleSize": [
        41,
        156
    ],
    "CapAdd": null,
    "CapDrop": null,
    "CgroupsMode": "private",
    "Dns": [],
    "DnsOptions": [],
    "DnsSearch": [],
    "ExtraHosts": null,
    "GroupAdd": null,
    "IpcMode": "private",
    "Cgroup": '',
    "Links": null,
}

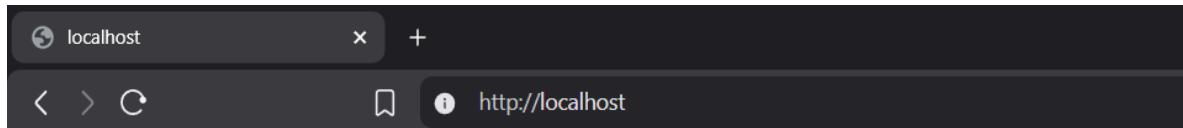
```

- 21.** Launch an NGINX container with a meaningful name and expose it on the host's port 80. Create an "index.html" file containing the text "Hello there, Let's be the Team CloudEthiX," and copy the file to the container's "/usr/share/nginx/html/" location. Access the container in a browser to verify that the webpage displays correctly.

```

webserver
root@vishalpc:~/Docker_tasks$ docker container run -dit --name webserver -p 80:80 nginx
332a8c5dbfc9b84ae1eaf3a779654256d153c3acd0f1ec6b61d6e2d08d4ac55b
root@vishalpc:~/Docker_tasks$ docker exec -it webserver /bin/bash
root@332a8c5dbfc9:/# echo "Hello there, Let's be the Team CloudEthiX" > index.html
root@332a8c5dbfc9:/# mv index.html /usr/share/nginx/html/
root@332a8c5dbfc9:/# cd /usr/share/nginx/html/
root@332a8c5dbfc9:/usr/share/nginx/html# ls
50x.html index.html
root@332a8c5dbfc9:/usr/share/nginx/html#
root@332a8c5dbfc9:/usr/share/nginx/html#
root@332a8c5dbfc9:/usr/share/nginx/html# |

```



Hello there, Let's be the Team CloudEthiX

22. Run a docker container with CPU and Memory limit.

docker container run --help

```
root@vishalpc:~/Docker_tasks# docker run -d -m 512m --memory-reservation=256m --cpus=2 --name newaap nginx
31357881496ee997dd111ef9bfb0a64ad804061341b37562027621242bc0dc19
root@vishalpc:~/Docker_tasks# docker inspect memcont1 | grep -i memory
    "Memory": 536870912,
    "MemoryReservation": 268435456,
    "MemorySwap": 1073741824,
    "MemorySwappiness": null,
root@vishalpc:~/Docker_tasks# docker inspect memcont1 | grep -i cpu
    "CpuShares": 0,
    "NanoCpus": 0,
    "CpuPeriod": 0,
    "CpuQuota": 0,
    "CpuRealtimePeriod": 0,
    "CpuRealtimeRuntime": 0,
    "CpusetCpus": "",
    "CpusetMems": "",
    "CpuCount": 0,
    "CpuPercent": 0,
```

23. Update CUP and Memory of docker container using docker update.

ref links :-

```
"CpuCount": 0,
"CpuPercent": 0,
root@vishalpc:~/Docker_tasks# docker update -m 1024m --cpus=1 newaap
newaap
root@vishalpc:~/Docker_tasks# docker inspect newaap | grep -i cpu
    "CpuShares": 0,
    "NanoCpus": 1000000000,
    "CpuPeriod": 0,
    "CpuQuota": 0,
    "CpuRealtimePeriod": 0,
    "CpuRealtimeRuntime": 0,
    "CpusetCpus": "",
    "CpusetMems": "",
    "CpuCount": 0,
    "CpuPercent": 0,
root@vishalpc:~/Docker_tasks# docker inspect newaap | grep -i memory
    "Memory": 1073741824,
    "MemoryReservation": 268435456,
    "MemorySwap": 1073741824,
    "MemorySwappiness": null,
root@vishalpc:~/Docker_tasks# |
```

24. Pull the Busy-box image to your local system, tag it, and push it to the Docker Hub repository "yourname_cloudeithix_busybox."

```
root@vishalpc:~/Docker_tasks# docker pull busybox
Using default tag: latest
latest: Pulling from library/busybox
e59838ecfc5: Pull complete
Digest: sha256:e3652a0a2fabd16ce889f0aa32c38eec347b997e73bd09e69c962ec7f8732ee
Status: Downloaded newer image for busybox:latest
docker.io/library/busybox:latest
root@vishalpc:~/Docker_tasks# docker image ls
REPOSITORY TAG IMAGE ID CREATED SIZE
httpd latest 6a4fe18d08d2 2 days ago 117MB
nginx latest d261fd19cb63 2 days ago 152MB
busybox latest 08ef35alc3f0 13 months ago 4.43MB
root@vishalpc:~/Docker_tasks# docker tag busybox:latest vishalbobhate/cloudeithix:v1
root@vishalpc:~/Docker_tasks# docker login -u vishalbobhate

Info → A Personal Access Token (PAT) can be used instead.
To create a PAT, visit https://app.docker.com/settings

Password:

WARNING! Your credentials are stored unencrypted in '/root/.docker/config.json'.
Configure a credential helper to remove this warning. See
https://docs.docker.com/go/credential-store/

Login Succeeded
root@vishalpc:~/Docker_tasks# docker push vishalbobhate/cloudeithix:v1
The push refers to repository [docker.io/vishalbobhate/cloudeithix]
e14542cc0629: Mounted from library/busybox
v1: digest: sha256:755d9ce09782b2f60fd3321878e611f871817aa8a726e8c605f2f67ae6ffa9e2 size: 527
root@vishalpc:~/Docker_tasks# |
```

Allow important notifications from Docker. You will get important notifications from Docker when do not select this app in the notification center. Allow

The screenshot shows the Docker Hub interface for the repository `vishalbobhate/cloudeithix`. The `v1` tag is selected. The page displays the following information:

- Last pushed 1 minute ago
- Repository size: 2.1 MB
- Star count: 0
- Download count: 0
- Docker commands: `docker push vishalbobhate/cloudeithix:tagname`
- Public view button
- General tab selected
- Tags tab selected (showing `v1`)
- Image Management, Collaborators, Webhooks, Settings tabs
- Sort by: Newest
- Filter tags:
- Delete button
- Table of tags:

TAG	Digest	OS/ARCH	Last pull	Compressed size
<code>v1</code>	<code>755d9ce09782</code>	linux/amd64	less than 1 day	2.11 MB

25. In your project directory, create a Dockerfile (named Dockerfile) with the following content.

```
FROM nginx:latest
```

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

Ensure you also have a file named custom-index.html in the same directory. Build the Docker image using the Dockerfile you created and push it to your repository. Delete the local image. Start a new container using the custom Nginx image that you just pushed. Map port 8080 on your host to port 80 in the container. Check the container page in browser.

```
root@vishalpc:~/Docker_tasks# docker run -d --name web_custom_nginx vishalbobhate/cloudeithix:latest
Unable to find image 'vishalbobhate/cloudeithix:latest' locally
latest: Pulling from vishalbobhate/cloudeithix
d7eecd7702a: Already exists
266626526d42: Already exists
320b0949be89: Already exists
d921c57c6a81: Already exists
9def903993e4: Already exists
52bc359bcbd7: Already exists
e2f8e296d9df: Already exists
c9e2adf41f1f: Already exists
Digest: sha256:7ba86a332bd8c8b06d4856cedaa225d293b6ed77c7a286587e6a2518284b35aa
Status: Downloaded newer image for vishalbobhate/cloudeithix:latest
95ab2d57654f759dbf54c928d269bb62f760b712c2bf1066df124d94c32a03bc
root@vishalpc:~/Docker_tasks# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
95ab2d57654f vishalbobhate/cloudeithix:latest "/docker-entrypoint..." 22 seconds ago Up 20 seconds 80/tcp web_custom_nginx
```



26. Push the Redis images tagged as version 1 and 3 to your Docker Hub repository, named "yourname_cloudeithix_redis."

```
root@vishalpc:~/Docker_tasks# docker run -d --name web_custom_nginx vishalbobhate/cloudeithix:latest
Unable to find image 'vishalbobhate/cloudeithix:latest' locally
latest: Pulling from vishalbobhate/cloudeithix
d7eecd7702a: Already exists
266626526d42: Already exists
320b0949be89: Already exists
d921c57c6a81: Already exists
9def903993e4: Already exists
52bc359bcbd7: Already exists
e2f8e296d9df: Already exists
c9e2adf41f1f: Already exists
Digest: sha256:7ba86a332bd8c8b06d4856cedaa225d293b6ed77c7a286587e6a2518284b35aa
Status: Downloaded newer image for vishalbobhate/cloudeithix:latest
95ab2d57654f759dbf54c928d269bb62f760b712c2bf1066df124d94c32a03bc
root@vishalpc:~/Docker_tasks# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
95ab2d57654f vishalbobhate/cloudeithix:latest "/docker-entrypoint..." 22 seconds ago Up 20 seconds 80/tcp web_custom_nginx
```

```

root@vishalpc:~/Docker_tasks#
root@vishalpc:~/Docker_tasks# docker pull redis
Using default tag: latest
latest: Pulling from library/redis
1addbd6b0d6b: Pull complete
22906777a096: Pull complete
5dec27664782: Pull complete
2e60b18d70d8: Pull complete
729797e636a7: Pull complete
4f4fb700ef54: Pull complete
6c981fc7c621: Pull complete
Digest: sha256:5c7c0445ed86918cb9efb96d9a6bfc03ed2059fe2c5f02b4d74f477ffe47915
Status: Downloaded newer image for redis:latest
docker.io/library/redis:latest
root@vishalpc:~/Docker_tasks# docker image ls
REPOSITORY          TAG      IMAGE ID      CREATED        SIZE
vishalbobhate/cloudeithix    latest   2b7f61ec9a0d  21 minutes ago  152MB
httpd               latest   6a4fe18d08d2  2 days ago   117MB
nginx               latest   d261fd19cb63  2 days ago   152MB
redis               latest   017b1c12abf9  2 days ago   137MB
busybox              latest   08ef35a1c3f0  13 months ago  4.43MB
vishalbobhate/cloudeithix    v1      08ef35a1c3f0  13 months ago  4.43MB
root@vishalpc:~/Docker_tasks# docker push vishalbobhate/vishal_cloudeithix_redis:version1
The push refers to repository [docker.io/vishalbobhate/vishal_cloudeithix_redis]
An image does not exist locally with the tag: vishalbobhate/vishal_cloudeithix_redis
root@vishalpc:~/Docker_tasks# docker redis:latest vishalbobhate/vishal_cloudeithix_redis:version1

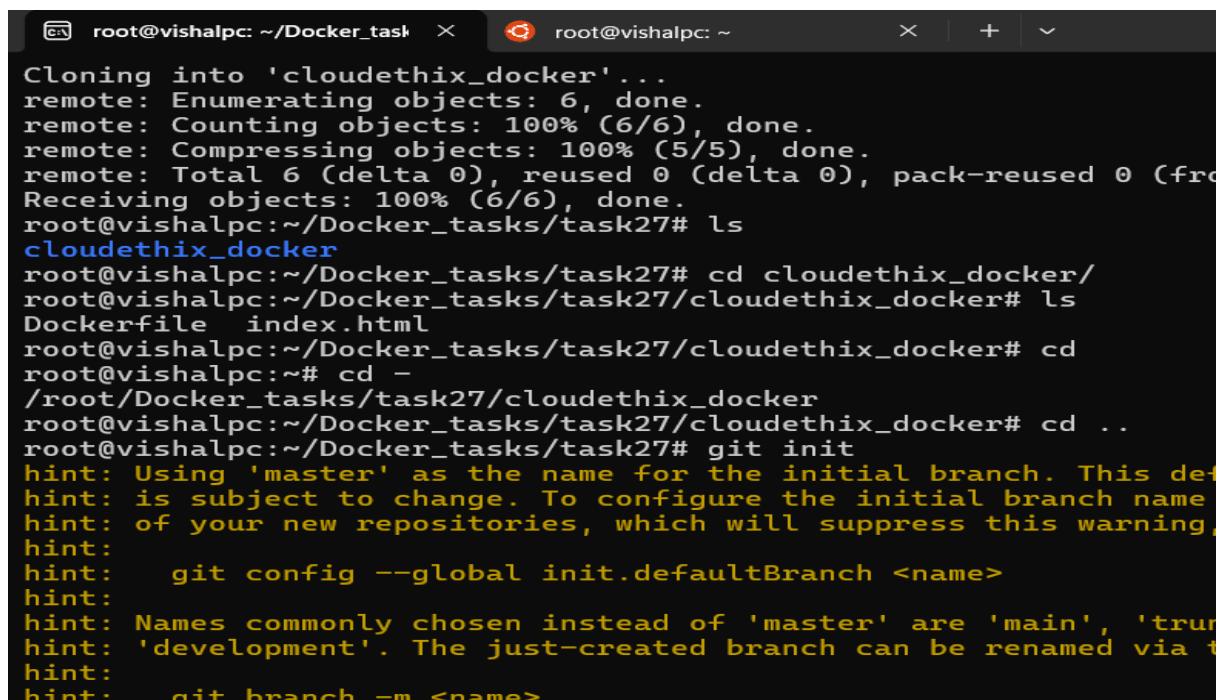
```

```

root@vishalpc:~/Docker_tasks# docker run -d --name web_custom_nginx vishalbobhate/cloudeithix:latest
Unable to find image 'vishalbobhate/cloudeithix:latest' locally
latest: Pulling from vishalbobhate/cloudeithix
d7ecded7702a: Already exists
266626526d42: Already exists
320b6949be89: Already exists
d921c57c6a81: Already exists
9def903993e4: Already exists
52bc359bcd7: Already exists
e2f8e296d9df: Already exists
c9e2adf41f1f: Already exists
Digest: sha256:7ba86a332bd8c8b66d4856cedaa225d293b6ed77c7a286587e6a2518284b35aa
Status: Downloaded newer image for vishalbobhate/cloudeithix:latest
95ab2d57654f759dbf54c928d269bb62f760b712c2bf1066df124d94c32a03bc
root@vishalpc:~/Docker_tasks# docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED            STATUS              PORTS               NAMES
95ab2d57654f        vishalbobhate/cloudeithix:latest   "/docker-entrypoint..."   22 seconds ago    Up 20 seconds     80/tcp   web_custom_nginx

```

27. Create a remote Git repository and add the Dockerfile and index.html files. Clone the repository locally and create a release branch. Build the Docker image from the release branch with a meaningful tag, then run a container from the image and expose it on host port 8383. Check the webpage in a browser, and upon success, push the image to your Docker Hub repository named "yourusername_cloudeithix_nginx." Finally, push the release branch to the remote Git repository and merge it by creating a pull request.



```

Cloning into 'cloudeithix_docker'...
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (5/5), done.
remote: Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from previous pack).
Receiving objects: 100% (6/6), done.
root@vishalpc:~/Docker_tasks/task27# ls
cloudeithix_docker
root@vishalpc:~/Docker_tasks/task27# cd cloudeithix_docker/
root@vishalpc:~/Docker_tasks/task27/cloudeithix_docker# ls
Dockerfile  index.html
root@vishalpc:~/Docker_tasks/task27/cloudeithix_docker# cd ..
root@vishalpc:~# cd -
/root/Docker_tasks/task27/cloudeithix_docker
root@vishalpc:~/Docker_tasks/task27/cloudeithix_docker# cd ..
root@vishalpc:~/Docker_tasks/task27# git init
hint: Using 'master' as the name for the initial branch. This is
hint: subject to change. To configure the initial branch name
hint: of your new repositories, which will suppress this warning,
hint:
hint:     git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk',
hint: 'development'. The just-created branch can be renamed via t
hint:
hint:     git branch -m <name>

```

```

/root/Docker_tasks/task27/cloudeithix_docker
root@vishalpc:~/Docker_tasks/task27/cloudeithix_docker# cd ..
root@vishalpc:~/Docker_tasks/task27# git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /root/Docker_tasks/task27/.git/
root@vishalpc:~/Docker_tasks/task27# git add

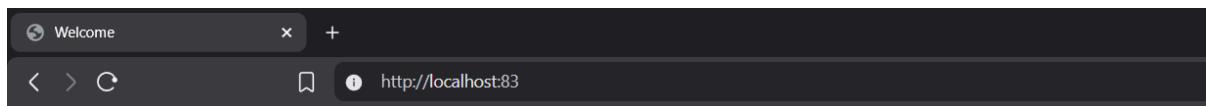
```

```

root@vishalpc:~/Docker_tasks/task27# git branch release
root@vishalpc:~/Docker_tasks/task27# git branch
* master
  release
root@vishalpc:~/Docker_tasks/task27# git checkout release
Switched to branch 'release'
root@vishalpc:~/Docker_tasks/task27# ls
cloudeithix_docker
root@vishalpc:~/Docker_tasks/task27# cd cloudeithix_docker/
root@vishalpc:~/Docker_tasks/task27/cloudeithix_docker# ls
Dockerfile index.html
root@vishalpc:~/Docker_tasks/task27/cloudeithix_docker# docker build -t mydocker_img
=> naming to docker.io/library/mydocker_img
root@vishalpc:~/Docker_tasks/task27/cloudeithix_docker# docker image ls
REPOSITORY          TAG      IMAGE ID      CREATED        SIZE
mydocker_img         latest   b5768552ea59  12 seconds ago  152MB
vishalbobhate/cloudeithix    latest   2b7f61ec9a0d  2 hours ago   152MB
httpd               latest   6a4fe18d08d2  2 days ago    117MB
nginx               latest   d261fd19cb63  2 days ago    152MB
redis               latest   017b1c12abf9  2 days ago    137MB
vishalbobhate/vishal_cloudeithix_redis  version1  017b1c12abf9  2 days ago    137MB
vishalbobhate/vishal_cloudeithix_redis  version3  017b1c12abf9  2 days ago    137MB
busybox              latest   08ef35a1c3f0  13 months ago  4.43MB
vishalbobhate/cloudeithix    v1      08ef35a1c3f0  13 months ago  4.43MB
root@vishalpc:~/Docker_tasks/task27/cloudeithix_docker# docker tag mydocker_img:latest vishalbobhate/cloudeithix:v4
root@vishalpc:~/Docker_tasks/task27/cloudeithix_docker# docker push vishalbobhate/cloudeithix:v4
The push refers to repository [docker.io/vishalbobhate/cloudeithix]
dc24ed7e0824: Pushed
d7217c60dca4: Layer already exists
d81df94f8d07: Layer already exists
99cd1b1b6a43: Layer already exists
2ced4cd78a7b: Layer already exists
8feb164cd673: Layer already exists
6e19587ac541: Layer already exists
36d06fe0cbc6: Layer already exists
v4: digest: sha256:d7c76c2e86fb7c700c34c98e0e30a1f5c2cda4cbcacf1b59c53cf98a47c3c38c53 size: 1985
root@vishalpc:~/Docker_tasks/task27/cloudeithix_docker# git push origin
Username for 'https://github.com': bobhatevishal
Password for 'https://bobhatevishal@github.com':
Everything up-to-date
root@vishalpc:~/Docker_tasks/task27/cloudeithix_docker# git checkout master
error: pathspec 'master' did not match any file(s) known to git
root@vishalpc:~/Docker_tasks/task27/cloudeithix_docker# git branch
* master
Enumerating objects: 2, done.
Counting objects: 100% (2/2), done.
Writing objects: 100% (2/2), 206 bytes | 206.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'release' on GitHub by visiting:
remote:   https://github.com/bobhatevishal/cloudeithix_docker/pull/new/release
remote:
remote: To https://github.com/bobhatevishal/cloudeithix_docker.git
 * [new branch]      release -> release
branch 'release' set up to track 'origin/release'.
root@vishalpc:~/Docker_tasks/task27# docker run -d --name webserver_27 -p 83:83 mydocker_img:latest
30ef20a2704d90e95d8e3260b24fd7b525d4c76cdel8d37f6ccce9eda05ela87
root@vishalpc:~/Docker_tasks/task27# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
ES 30ef20a2704d mydocker_img:latest "/docker-entrypoint..." 44 seconds ago Up 43 seconds 80/tcp, 0.0.0.0:83->83/tcp, [:]:83->83/tcp web
server_27 f66e5720e3f2 vishalbobhate/cloudeithix:latest "/docker-entrypoint..." 2 hours ago Up 2 hours 0.0.0.0:80->80/tcp, [:]:80->80/tcp web
_custom_nginx root@vishalpc:~/Docker_tasks/task27# docker run -d --name webserver_27 -p 83:80 mydocker_img:latest
docker: Error response from daemon: Conflict. The container name "/webserver_27" is already in use by container "30ef20a2704d90e95d8e3260b24fd7b525d4c76cdel8d37f6ccce9eda05ela87". You have to remove (or rename) that container to be able to reuse that name.

Run 'docker run --help' for more information
root@vishalpc:~/Docker_tasks/task27# docker run -d --name webserver_27 -p 83:80 mydocker_img:latest
c1c07bca33343d7a4cdf8af96032afeac5c71b43c68a942c2a061970357702bf

```



Hello from CloudEthix WebApp

A screenshot of a GitHub repository page for 'cloudeithx_docker'. The repository has 2 branches (main, release) and 0 tags. The main branch has 2 commits. The repository has 0 stars, 0 forks, and 0 releases. It also has 0 packages and 0 languages listed.

A screenshot of the Docker Hub interface showing the 'vishalbobhate/cloudeithx' repository. The repository has 1 private tag, 'v4'. The Docker commands section shows the command 'docker push vishalbobhate/cloudeithx:v4'. The repository size is 56.98 MB.

28. Save all local Redis images as a .tar file in the master branch of your local repository. Delete all Redis images from your local system and push the master branch to the remote repository. Load the Redis images from the tar file to your local system, and verify that all images have been loaded correctly.

```
root@vishalpc:~/Docker_tasks# ls
Dockerfile custom-index.html task27
root@vishalpc:~/Docker_tasks# docker image ls
REPOSITORY          TAG      IMAGE ID      CREATED        SIZE
mydocker_img        latest   b5768552ea59  33 minutes ago  152MB
vishalbobhate/cloudeithix    v4      b5768552ea59  33 minutes ago  152MB
vishalbobhate/cloudeithix    latest   2b7f61ec9a0d  3 hours ago   152MB
httpd               latest   6a4fe18d08d2  2 days ago    117MB
nginx               latest   d261fd19cb63  2 days ago    152MB
redis               latest   017b1c12abf9  2 days ago    137MB
vishalbobhate/vishal_cloudeithix_redis  version1  017b1c12abf9  2 days ago    137MB
vishalbobhate/vishal_cloudeithix_redis  version3  017b1c12abf9  2 days ago    137MB
busybox              latest   08ef35alc3f0  13 months ago  4.43MB
vishalbobhate/cloudeithix    v1      08ef35alc3f0  13 months ago  4.43MB
root@vishalpc:~/Docker_tasks# docker image ls | grep -i "redis"
vishalbobhate/vishal_cloudeithix_redis  version1  017b1c12abf9  2 days ago    137MB
vishalbobhate/vishal_cloudeithix_redis  version3  017b1c12abf9  2 days ago    137MB
redis                latest   017b1c12abf9  2 days ago    137MB
root@vishalpc:~/Docker_tasks# git branch
fatal: not a git repository (or any of the parent directories): .git
root@vishalpc:~/Docker_tasks# cd task27
root@vishalpc:~/Docker_tasks/task27# git branch
  master
* release
root@vishalpc:~/Docker_tasks/task27# git checkout master
Switched to branch 'master'
```

```
root@vishalpc:~/Docker_tasks/task27# git checkout master
Switched to branch 'master'
root@vishalpc:~/Docker_tasks/task27# docker save -o redis1.tar > visha
-bash: vishalbobhate/vishal_cloudeithix_redis:version1: No such file or
root@vishalpc:~/Docker_tasks/task27# docker save -o redis1.tar vishalb
root@vishalpc:~/Docker_tasks/task27# docker save -o redis3.tar vishalb
root@vishalpc:~/Docker_tasks/task27# ls
cloudeithix_docker  redis1.tar  redis3.tar
root@vishalpc:~/Docker_tasks/task27# git add .
root@vishalpc:~/Docker_tasks/task27# git commit -m "redis.tar files ad
[master f7c515a] redis.tar files added
Committer: root <root@vishalpc.localdomain>
```

```
root@vishalpc:~/Docker_tasks/task27# git checkout master
Switched to branch 'master'
root@vishalpc:~/Docker_tasks/task27# docker save -o redis1.tar > vishalbobhate/vishal_cloudeithix_redis:version1
-bash: vishalbobhate/vishal_cloudeithix_redis:version1: No such file or directory
root@vishalpc:~/Docker_tasks/task27# docker save -o redis1.tar vishalbobhate/vishal_cloudeithix_redis:version1
root@vishalpc:~/Docker_tasks/task27# docker save -o redis3.tar vishalbobhate/vishal_cloudeithix_redis:version3
root@vishalpc:~/Docker_tasks/task27# ls
cloudeithix_docker  redis1.tar  redis3.tar
root@vishalpc:~/Docker_tasks/task27# git add .
root@vishalpc:~/Docker_tasks/task27# git commit -m "redis.tar files added"
[master f7c515a] redis.tar files added
Committer: root <root@vishalpc.localdomain>
You have committed changes to the working tree.
```

```

root@vishalpc:~/Docker_tasks/task27# gunzip redis
redis1.tar.gz  redis3.tar.gz
root@vishalpc:~/Docker_tasks/task27# gunzip redis1.tar.gz  redis3.tar.gz
root@vishalpc:~/Docker_tasks/task27# ls
cloudethix_docker  redis1.tar  redis3.tar
root@vishalpc:~/Docker_tasks/task27# docker load -i redis1.tar
Loaded image: vishalbobhate/vishal_cloudehix_redis:version1
root@vishalpc:~/Docker_tasks/task27# docker load -i redis3.tar
Loaded image: vishalbobhate/vishal_cloudehix_redis:version3
root@vishalpc:~/Docker_tasks/task27# docker image ls
REPOSITORY          TAG      IMAGE ID   CREATED    SIZE
mydocker_img        latest   b5768552ea59  About an hour ago  152MB
vishalbobhate/cloudehix   v4      b5768552ea59  About an hour ago  152MB
vishalbobhate/cloudehix   latest   2b7f61ec9a0d  3 hours ago   152MB
httpd               latest   6a4fe18d08d2  2 days ago   117MB
nginx               latest   d261fd19cb63  2 days ago   152MB
redis               latest   017b1c12abf9  2 days ago   137MB
vishalbobhate/vishal_cloudehix_redis  version1  017b1c12abf9  2 days ago   137MB
vishalbobhate/vishal_cloudehix_redis  version3  017b1c12abf9  2 days ago   137MB
busybox              latest   08ef35alc3f0  13 months ago  4.43MB
vishalbobhate/cloudehix   v1      08ef35alc3f0  13 months ago  4.43MB
root@vishalpc:~/Docker_tasks/task27# docker image ls | grep -i redis
redis               latest   017b1c12abf9  2 days ago   137MB
vishalbobhate/vishal_cloudehix_redis  version1  017b1c12abf9  2 days ago   137MB
vishalbobhate/vishal_cloudehix_redis  version3  017b1c12abf9  2 days ago   137MB
root@vishalpc:~/Docker_tasks/task27#

```

The screenshot shows a GitHub repository page for 'cloudehix_docker'. The repository is public and has 3 branches and 0 tags. The master branch is active. It shows recent pushes from the master branch. The repository has 0 stars, 0 forks, and 0 watching. It also lists releases, packages, and languages.

29. Pull the Busy-box image to your local system, tag it, and push it to the Docker Hub repository "yourname_cloudehix_busybox." Export the Docker image from the NGINX container, create a .tar file, and import the tar file to create a Docker image with a meaningful name. After importing the image, tag it and push it to the "yourname_cloudehix_busybox" Docker Hub repository.

```

redis      latest   017b1c12abf9  2 days ago   137MB
vishalbobhate/vishal_cloudeithix_redis  version1  017b1c12abf9  2 days ago   137MB
vishalbobhate/vishal_cloudeithix_redis  version3  017b1c12abf9  2 days ago   137MB
busybox    latest   08ef35a1c3f0  13 months ago  4.43MB
vishalbobhate/cloudeithix           v1       08ef35a1c3f0  13 months ago  4.43MB
vishalbobhate/cloudeithix_busybox     v5       08ef35a1c3f0  13 months ago  4.43MB
root@vishalpc:~/Docker_tasks# docker push bobhatevishal/cloudeithix_busybox:v5
The push refers to repository [docker.io/bobhatevishal/cloudeithix_busybox]
An image does not exist locally with the tag: bobhatevishal/cloudeithix_busybox
root@vishalpc:~/Docker_tasks# docker tag busybox:latest vishalbobhate/cloudeithix_busybox:v5
root@vishalpc:~/Docker_tasks# docker push bobhatevishal/cloudeithix_busybox:v5
The push refers to repository [docker.io/bobhatevishal/cloudeithix_busybox]
An image does not exist locally with the tag: bobhatevishal/cloudeithix_busybox
root@vishalpc:~/Docker_tasks# docker tag vishalbobhate/cloudeithix_busybox vishalbobhate/cloudeithix_busybox:v5
Error response from daemon: No such image: vishalbobhate/cloudeithix_busybox:latest
root@vishalpc:~/Docker_tasks# docker tag vishalbobhate/cloudeithix_busybox:v5 vishalbobhate/cloudeithix_busybox:v5
root@vishalpc:~/Docker_tasks# docker push bobhatevishal/cloudeithix_busybox:v5
The push refers to repository [docker.io/bobhatevishal/cloudeithix_busybox]
An image does not exist locally with the tag: bobhatevishal/cloudeithix_busybox
root@vishalpc:~/Docker_tasks# docker login
Authenticating with existing credentials... [Username: vishalbobhate]

Info → To login with a different account, run 'docker logout' followed by 'docker login'

Login Succeeded

```

```

root@vishalpc:~/Docker_tasks# docker push vishalbobhate/cloudeithix_busybox:v5
The push refers to repository [docker.io/vishalbobhate/cloudeithix_busybox]
e14542cc0629: Mounted from vishalbobhate/cloudeithix
v5: digest: sha256:755d9ce09782b2f60fd332187e611f871817aa8a726e8c605f2f67ae6ffa9e2 size: 527
root@vishalpc:~/Docker_tasks# docker run -d --name nginx_container nginx
669ae08cb00cb15e8f8a624c3e5ccb9b94722d9b2785ecef47ae42e054c17a1c
root@vishalpc:~/Docker_tasks# docker export nginx_container -o nginx_cont.tar
root@vishalpc:~/Docker_tasks# ls
Dockerfile custom-index.html nginx_cont.tar task27
root@vishalpc:~/Docker_tasks# docker import nginx_cont.tar vishalbobhate/cloudeithix_busybox:v5
sha256:4d01f95718d4655f8134a653f8168e0114dc6d9779a5ef1fa44df44c216849e
root@vishalpc:~/Docker_tasks# docker image ls | grep -i busybox
vishalbobhate/cloudeithix_busybox      v5      4d01f95718d4  2 minutes ago  150MB
busybox                            latest   08ef35a1c3f0  13 months ago  4.43MB
vishalbobhate/cloudeithix_busybox      <none>  08ef35a1c3f0  13 months ago  4.43MB
root@vishalpc:~/Docker_tasks# docker import nginx_cont.tar vishalbobhate/cloudeithix_busybox:imported

```

```

root@vishalpc:~/Docker_tasks# docker import nginx_cont.tar vishalbobhate/cloudeithix_busybox:imported
sha256:b96ccca240c4b9729ddd260c1fc9551a6d2de52d2159596b54841fe883f060
root@vishalpc:~/Docker_tasks# docker image ls | grep -i busybox
vishalbobhate/cloudeithix_busybox      imported  b96ccca240c4  4 seconds ago  150MB
vishalbobhate/cloudeithix_busybox      v5      4d01f95718d4  4 minutes ago  150MB
busybox                            latest   08ef35a1c3f0  13 months ago  4.43MB
vishalbobhate/cloudeithix_busybox      <none>  08ef35a1c3f0  13 months ago  4.43MB
root@vishalpc:~/Docker_tasks# docker tag vishalbobhate/cloudeithix_busybox:imported vishalbobhate/cloudeithix_busybox:imported
root@vishalpc:~/Docker_tasks# docker pu
pull (Download an image from a registry) push (Upload an image to a registry)
root@vishalpc:~/Docker_tasks# docker push vishalbobhate/cloudeithix_busybox:imported
The push refers to repository [docker.io/vishalbobhate/cloudeithix_busybox]
1bce9712f895: Pushed
imported: digest: sha256:b6aaa9c155106eac66b84954a51a19a7992f03c6ee3b6e4b0aec59e38023c796 size: 528
root@vishalpc:~/Docker_tasks|

```

The screenshot shows the Docker Hub 'My Hub' interface. On the left, there's a sidebar with options like 'Repositories', 'Collaborations', 'Settings', 'Default privacy', 'Notifications', 'Billing', and 'Usage'. The 'Repositories' tab is currently active. In the main area, the 'vishalbobhate' repository is selected. The repository page has tabs for 'General', 'Tags', 'Image Management', 'Collaborators', 'Webhooks', and 'Settings'. The 'General' tab shows the repository was last pushed 2 minutes ago, has a size of 59.6 MB, and has 0 stars. It also shows a 'Tags' section which is currently empty. The 'Tags' table has columns for 'Tag', 'OS', 'Type', 'Pulled', and 'Pushed'. One row is present in the table, labeled 'imported', with 'Image' as the type, 'less than 1 day' as the pulled time, and '2 minutes' as the pushed time.

30. Dockerfile creation: Create a simple Dockerfile to build a custom image with the following specifications:

Base image: Ubuntu

Install packages: curl, vim, and git

Set an environment variable: MY_NAME=Your_Name

Build the custom image using docker build and list all available images using docker images.

```
root@vishalpc:~/Docker_tasks# mkdir Docker_task30
root@vishalpc:~/Docker_tasks# cd Docker_task30/
root@vishalpc:~/Docker_tasks/Docker_task30# nano Dockerfile
root@vishalpc:~/Docker_tasks/Docker_task30# docker build -t task30_img .
[+] Building 52.8s (7/7) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 150B
=> [internal] load metadata for docker.io/library/ubuntu:latest
=> [auth] library/ubuntu:pull token for registry-1.docker.io
=> [internal] load .dockercignore
=> => transferring context: 2B
=> [1/2] FROM docker.io/library/ubuntu:latest@sha256:66460d557b25769b102175144d538d88219c077c678a49af4afca6fbfc1b5252
=> => resolve docker.io/library/ubuntu:latest@sha256:66460d557b25769b102175144d538d88219c077c678a49af4afca6fbfc1b5252
=> => sha256:4b3ffd8ccb520la0fc03585952effb4ed2d1ea5e704d2e7330212f08b16c86a3 29.72MB / 29.72MB
=> => sha256:66460d557b25769b102175144d538d88219c077c678a49af4afca6fbfc1b5252 6.69kB / 6.69kB
=> => sha256:d22e4fb389065fa4a61bb304106768698ef6d955fe8a7e0cd3cd6de80fa7eec 424B / 424B
=> => extracting sha256:4b3ffd8ccb520la0fc03585952effb4ed2d1ea5e704d2e7330212f08b16c86a3
=> [2/2] RUN apt-get update && apt-get install -y curl vim git
=> => exporting to image
=> => exporting layers
=> => writing image sha256:95b554af674a2c4901bf77c1eb1731e62debc8aca89a5c76bc20a97da233682
=> => naming to docker.io/library/task30_img
root@vishalpc:~/Docker_tasks/Docker_task30# docker image ls
REPOSITORY          TAG      IMAGE ID      CREATED     SIZE
task30_img          latest   95b554af674a  19 seconds ago  289MB
vishalbobhate/cloudbethix_busybox    imported   b96ccca240c4  11 minutes ago  150MB
vishalbobhate/cloudbethix_busybox    v5        4d01f95718d4  15 minutes ago  150MB

```

```
=> => naming to docker.io/library/task30_img
root@vishalpc:~/Docker_tasks/Docker_task30# docker image ls
REPOSITORY          TAG      IMAGE ID      CREATED     SIZE
task30_img          latest   95b554af674a  19 seconds ago  289MB
vishalbobhate/cloudbethix_busybox    imported   b96ccca240c4  11 minutes ago  150MB
vishalbobhate/cloudbethix_busybox    v5        4d01f95718d4  15 minutes ago  150MB
mydocker_img        latest   b5768552ea59  2 hours ago   152MB
vishalbobhate/cloudbethix           v4        b5768552ea59  2 hours ago   152MB
vishalbobhate/cloudbethix           latest   2b7f61ec9a0d  4 hours ago   152MB
httpd               latest   6a4fe18d08d2  2 days ago   117MB
nginx               latest   d261fd19cb63  2 days ago   152MB
redis               latest   017b1c12abf9  2 days ago   137MB
vishalbobhate/vishal_cloudbethix_redis  version1  017b1c12abf9  2 days ago   137MB
vishalbobhate/vishal_cloudbethix_redis  version3  017b1c12abf9  2 days ago   137MB
busybox              latest   08ef35a1c3f0  13 months ago  4.43MB
vishalbobhate/cloudbethix            v1        08ef35a1c3f0  13 months ago  4.43MB
vishalbobhate/cloudbethix_busybox    <none>   08ef35a1c3f0  13 months ago  4.43MB
root@vishalpc:~/Docker_tasks/Docker_task30# docker run -it task30_img:latest
root@0b7198096658:/# hostname
0b7198096658
root@0b7198096658:/# echo "$MY_NAME"
Vishal_Bobhate
root@0b7198096658:/# |
```

31. Create Directories: Establish two directories named "DHUB" and "AWSECR."

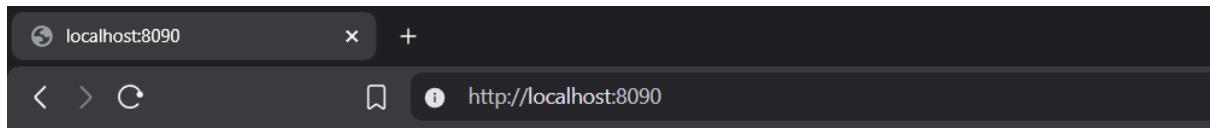
```
root@vishalpc:~/Docker_tasks/Docker_task30# mkdir DHUB AWSECR
root@vishalpc:~/Docker_tasks/Docker_task30# ls -ltr
total 12
-rw-r--r-- 1 root root 113 Nov  6 10:56 Dockerfile
drwxr-xr-x 2 root root 4096 Nov  6 11:04 DHUB
drwxr-xr-x 2 root root 4096 Nov  6 11:04 AWSECR
root@vishalpc:~/Docker_tasks/Docker_task30# |
```

32. Dockerfile Creation: Develop two Dockerfiles to construct custom images with the following specifications:

- Base image: Ubuntu
- Install packages: httpd
- Add "I am from Docker Hub" to the index.html file for DHUB directory and "I am from ECR" for AWSECR directory.
- Set environment variable ENV_NAME=DHUB for the DHUB directory and ENV_NAME=AWSECR for the AWSECR directory.
- Start http service using ENTRYPOINT
- Expose port 80.

```
root@vishalpc:~/Docker_tasks/Docker_task30# cd DHUB/
root@vishalpc:~/Docker_tasks/Docker_task30/DHUB# ls
root@vishalpc:~/Docker_tasks/Docker_task30/DHUB# nano Dockerfile
root@vishalpc:~/Docker_tasks/Docker_task30/DHUB# docker build -t Dhub_img .
[+] Building 0.0s (0/0)
ERROR: failed to build: invalid tag "Dhub_img": repository name must be lowercase
root@vishalpc:~/Docker_tasks/Docker_task30/DHUB# docker build -t dhub_img .
[+] Building 37.1s (8/8) FINISHED
--> [internal] load build definition from Dockerfile
--> => transferring dockerfile: 258B
--> [internal] load metadata for docker.io/library/ubuntu:latest
--> [auth] library/ubuntu:pull token for registry-1.docker.io
--> [internal] load .dockerrcignore
--> => transferring context: 2B
--> CACHED [1/3] FROM docker.io/library/ubuntu:latest@sha256:66460d557b25769b102175144d538d88219c077c678a49af4afca6fbfc1b5252
--> [2/3] RUN apt-get update && apt-get install -y apache2
--> [3/3] RUN echo "I am from Docker Hub" > /var/www/html/index.html
--> exporting to image
--> => exporting layers
--> => writing image sha256:81521e6f9dfaee71024b5495d2d98b3d47118792164666ec386808fd8bfc9b3b
--> => naming to docker.io/library/dhub_img
root@vishalpc:~/Docker_tasks/Docker_task30/DHUB# docker image ls | grep -i dhub
dhub_img          latest      81521e6f9dfa   About a minute ago   241MB
root@vishalpc:~/Docker_tasks/Docker_task30/DHUB# docker run -d --name dhubapp -p 8090:80 dhub_img:latest
ead6808bd832533a32759d79263871013c138c5a9e91e893ca5b9e42738c547d
root@vishalpc:~/Docker_tasks/Docker_task30/DHUB# |
```

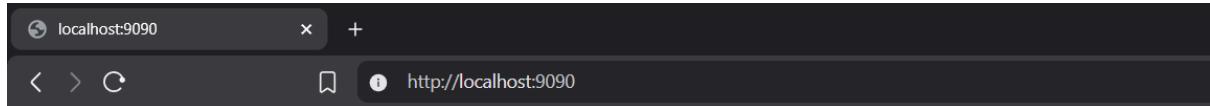
GNU nano 7.2	Dockerfile
FROM ubuntu:latest	
RUN apt-get update && apt-get install -y apache2	
RUN echo "I am from Docker Hub" > /var/www/html/index.html	
ENV ENV_NAME=DHUB	
EXPOSE 80	
ENTRYPOINT ["/usr/sbin/apache2ctl", "-D", "foreground"]	



I am from Docker Hub

```
root@vishalpc:~/Docker_tasks/Docker_task30/DHUB# cd ..
root@vishalpc:~/Docker_tasks/Docker_task30# cd AWSECR/
root@vishalpc:~/Docker_tasks/Docker_task30/AWSECR# nano Dockerfile
root@vishalpc:~/Docker_tasks/Docker_task30/AWSECR# docker build -t awsecr_app .
[+] Building 2.9s (8/8) FINISHED
   => [internal] load build definition from Dockerfile
   => transferring dockerfile: 250B
   => [internal] load metadata for docker.io/library/ubuntu:latest
   => [auth] library/ubuntu:pull token for registry-1.docker.io
   => [internal] load .dockerignore
   => => transferring context: 2B
   => [1/3] FROM docker.io/library/ubuntu:latest@sha256:66460d557b25769b102175144d538d88219c077c678a49af4afca6fbfc1b5252
   => CACHED [2/3] RUN apt-get update && apt-get install -y apache2
   => [3/3] RUN echo "I am from ECR" > /var/www/html/index.html
   => exporting to image
   => => exporting layers
   => => writing image sha256:b79ad855aef77639a22959dfa98cff0ba80bc4b368f77ab631c84bf6192bfb53
   => => naming to docker.io/library/awsecr_app
root@vishalpc:~/Docker_tasks/Docker_task30/AWSECR# docker image ls | grep -i awse
awsecr_app          latest      b79ad855aef7  14 seconds ago  241MB
root@vishalpc:~/Docker_tasks/Docker_task30/AWSECR# docker run -d --name awsecr_svr -p 9090:80 awsecr_app:latest
55a430ea4197ee0a62e396e6df2c9358faed80582f7202abb2d21d2917f48730
```

```
GNU nano 7.2
FROM ubuntu:latest
RUN apt-get update && apt-get install -y apache2
RUN echo "I am from ECR" > /var/www/html/index.html
ENV ENV_NAME=AWSECR
EXPOSE 80
ENTRYPOINT ["/usr/sbin/apache2ctl", "-D", "FOREGROUND"]
```



I am from ECR

33. Build Custom Images: Utilize the docker build command to build the custom images. List all available images using docker images.

```
root@vishalpc:~/Docker_tasks/Docker_task30/AWSECR# docker image ls
REPOSITORY          TAG      IMAGE ID      CREATED       SIZE
awsecr_app         latest   b79ad855aef7  5 minutes ago  241MB
dhub_img           latest   81521e6f9dfa  14 minutes ago  241MB
```

34. Push Images to Repositories: Push the Docker image to Docker Hub. Push the Docker image to AWS ECR.

```
root@vishalpc:~/Docker_tasks/Docker_task30# docker tag awsecr_app:latest vishalbobhate/cloudeithix:v10
root@vishalpc:~/Docker_tasks/Docker_task30# docker tag dhub_img:latest vishalbobhate/cloudeithix:v11
root@vishalpc:~/Docker_tasks/Docker_task30# docker push vishalbobhate/cloudeithix
Using default tag: latest
The push refers to repository [docker.io/vishalbobhate/cloudeithix]
3cef8777468f: Layer already exists
d7217c60dca4: Layer already exists
d81df94f8d07: Layer already exists
99cd1bb16a43: Layer already exists
2ced4cd78a7b: Layer already exists
8feb164cd673: Layer already exists
6e19587ac541: Layer already exists
36d06fe0cbc6: Layer already exists
latest: digest: sha256:7ba86a332bd8c8b06d4856cedaa225d293b6ed77c7a286587e6a2518284b35aa size: 1985
root@vishalpc:~/Docker_tasks/Docker_task30# |
```

```
Default region name [None]:
Default output format [None]:
root@vishalpc:~# aws ecr-public get-login-password --region us-east-1 | docker login --username AWS --password-stdin public.ecr.aws/n6g3p4z8

WARNING! Your credentials are stored unencrypted in '/root/.docker/config.json'.
Configure a credential helper to remove this warning. See
https://docs.docker.com/go/credential-store/

Login Succeeded
root@vishalpc:~# cd -
/root/Docker_tasks/Docker_task30
root@vishalpc:~/Docker_tasks/Docker_task30# docker build -t vishal/apache2_01 .
[+] Building 4.2s (7/7) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 150B
=> [internal] load metadata for docker.io/library/ubuntu:latest
=> [auth] library/ubuntu:pull token for registry-1.docker.io
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [1/2] FROM docker.io/library/ubuntu:latest@sha256:66460d557b25769b102175144d538d88219c077c678a49af4afca6fbfc1b5252
=> CACHED [2/2] RUN apt-get update && apt-get install -y curl vim git
=> exporting to image
=> => exporting layers
=> => writing image sha256:95b554af674a2c4901bf77c1eb1731e62debc8aca89a5c76bc20a97da233682
=> => naming to docker.io/vishal/apache2_01
root@vishalpc:~/Docker_tasks/Docker_task30# docker tag vishal/apache2_01:latest public.ecr.aws/n6g3p4z8/vishal/apache2_01:latest
root@vishalpc:~/Docker_tasks/Docker_task30# docker push public.ecr.aws/n6g3p4z8/vishal/apache2_01:latest
The push refers to repository [public.ecr.aws/n6g3p4z8/vishal/apache2_01]
fc1989447a26: Pushed
073ec47a8c22: Pushed
latest: digest: sha256:d13b6cb5922991023c49713a6f09ffe902c291ebb0c6c6925d386fb9db220657 size: 741
root@vishalpc:~/Docker_tasks/Docker_task30# |
```

35. Run Containers:

```
docker run -d -p 8081:80 --name I_AM_FROM_DHUB your_docker_hub_image
```

```
docker run -d -p 8082:80 --name I_AM_FROM_ECR your_aws_ecr_image
```

```
Run 'docker run --help' for more information
root@vishalpc:~/Docker_tasks/Docker_task30# docker run -d -p 8020:80 --name I_AM_FROM_DHUB vishalbobhate/cloudeithix:latest
a485817e078eed6d23d76b7eb66265d2632a931e248a1098e43c06d303277cf6
root@vishalpc:~/Docker_tasks/Docker_task30# docker run -d -p 8030:80 --name I_AM_FROM_ECR public.ecr.aws/n6g3p4z8/vishal/apache2_01
c4eb666e913fc71291a0f739b4842827fbabc30810bb0e469c37bc398365b7fb5
root@vishalpc:~/Docker_tasks/Docker_task30#
root@vishalpc:~/Docker_tasks/Docker_task30#
```

36. Access Pages from Browser:

Open a web browser and access the pages:

For Docker Hub: <http://localhost:8081>

For AWS ECR: <http://localhost:8082>

