1. Push the Redis images tagged as version 1 and 3 to your Docker Hub repository, named "yourname\_cloudethix\_redis."

root@DESKTOP-PDOJQQA:~# **docker pull redis**

Using default tag: latest

latest: Pulling from library/redis

2f44b7a888fa: Pull complete

c55535369ffc: Pull complete

sha256:b5ddcd52d425a8e354696c022f392fe45fca928f68d6289e6bb4a709c3a74668

Status: Downloaded newer image for redis:latest

docker.io/library/redis:latest

root@DESKTOP-PDOJQQA:~# **docker image ls**

REPOSITORY TAG IMAGE ID CREATED SIZE

image latest 338075de0bc0 8 days ago 584MB

**redis**  latest bdff4838c172 9 days ago 138MB

root@DESKTOP-PDOJQQA:~# **docker image tag redis vivekmore5292/vivek\_cloudethix\_redis:v1**

root@DESKTOP-PDOJQQA:~# **docker image ls**

REPOSITORY TAG IMAGE ID CREATED SIZE

vivekmore5292/local\_app\_images latest 338075de0bc0 8 days ago 584MB

redis latest bdff4838c172 9 days ago 138MB

**vivekmore5292/vivek\_cloudethix\_redis v1** bdff4838c172 9 days ago 138MB

root@DESKTOP-PDOJQQA:~# **docker push vivekmore5292/vivek\_cloudethix\_redis:v1**

The push refers to repository [docker.io/vivekmore5292/vivek\_cloudethix\_redis]

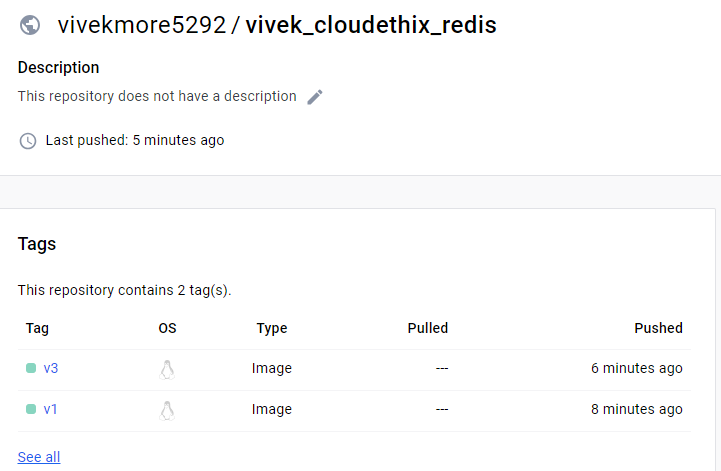
571ade696b26: Mounted from library/redis

v1: digest: sha256:5d5d31a84c7fec11a3c8a29b04b1712f650a98338f6a51152de42459ea24060b size: 1986

root@DESKTOP-PDOJQQA:~# **docker image tag redis:latest vivekmore5292/vivek\_cloudethix\_redis:v3**

root@DESKTOP-PDOJQQA:~# **docker push vivekmore5292/vivek\_cloudethix\_redis:v3**

v3: digest: sha256:5d5d31a84c7fec11a3c8a29b04b1712f650a98338f6a51152de42459ea24060b size: 1986



02. 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 "yourname\_cloudethix\_nginx."

              Finally, push the release branch to the remote Git repository and merge it by creating a pull request.

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Creating one remote repo on github: Docker\_remote after that create two files dockerfile and index.html

root@DESKTOP-PDOJQQA:~# **git clone git@github.com:vivekmore2001/Docker\_remote.git**

Cloning into 'Docker\_remote'...

remote: Enumerating objects: 9, done.

remote: Counting objects: 100% (9/9), done.

remote: Compressing objects: 100% (6/6), done.

remote: Total 9 (delta 1), reused 0 (delta 0), pack-reused 0

Receiving objects: 100% (9/9), done.

Resolving deltas: 100% (1/1), done.

root@DESKTOP-PDOJQQA:~# **cd Docker\_remote/**

root@DESKTOP-PDOJQQA:Docker\_remote# **ll**

total 24

drwxr-xr-x 3 root root 4096 Jan 19 11:40 ./

drwx------ 15 root root 4096 Jan 19 11:40 ../

drwxr-xr-x 8 root root 4096 Jan 19 11:40 .git/

-rw-r--r-- 1 root root 6 Jan 19 11:40 Dockerfile

-rw-r--r-- 1 root root 30 Jan 19 11:40 README.md

-rw-r--r-- 1 root root 85 Jan 19 11:40 index.html

root@DESKTOP-PDOJQQA:Docker\_remote# **docker build -t my\_image:ngin .**

[+] Building 0.2s (7/7) FINISHED docker:default

=> [internal] load build definition from Dockerfile 0.0s

=> => transferring dockerfile: 93B 0.0s

=> [internal] load .dockerignore 0.0s

=> => transferring context: 2B 0.0s

=> [internal] load metadata for docker.io/library/nginx:latest 0.0s

=> [internal] load build context 0.0s

=> => transferring context: 31B 0.0s

=> [1/2] FROM docker.io/library/nginx:latest 0.0s

=> CACHED [2/2] COPY index.html /usr/share/nginx/html 0.0s

=> exporting to image 0.0s

=> => exporting layers 0.0s

=> => writing image sha256:6601d9cee435d9da34d4a1316c52155c811b4bd7a7743fc2479ec4b208c9fd3e 0.0s

=> => naming to docker.io/library/my\_image:ngin 0.0s

root@DESKTOP-PDOJQQA:Docker\_remote# **docker image ls**

REPOSITORY TAG IMAGE ID CREATED SIZE

linuxvm v1 6601d9cee435 49 minutes ago 187MB

my\_image ngin 6601d9cee435 49 minutes ago 187MB

root@DESKTOP-PDOJQQA:Docker\_remote# **docker container run -itd -p 8383:80 --name new-demo my\_image:ngin**

d94e15f708af28a3391ed92615219720be69dd1d018fa116d61c62e4db44f37a

root@DESKTOP-PDOJQQA:Docker\_remote# docker container ls

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

d94e15f708af my\_image:ngin "/docker-entrypoint.…" 58 seconds ago Up 57 seconds 0.0.0.0:8383->80/tcp, :::8383->80/tcp new-demo

root@DESKTOP-PDOJQQA:Docker\_remote# **git checkout -b release**

Switched to a new branch 'release'

root@DESKTOP-PDOJQQA:Docker\_remote# **git branch**

main

\* release

root@DESKTOP-PDOJQQA:Docker\_remote# **docker image tag my\_image:ngin vivekmore5292/vivek\_cloudethix\_nginx:ngin**

root@DESKTOP-PDOJQQA:Docker\_remote# **docker push vivekmore5292/vivek\_cloudethix\_nginx:ngin**

root@DESKTOP-PDOJQQA:Docker\_remote# **git push -u origin release**

Enumerating objects: 5, done.

Counting objects: 100% (5/5), done.

Delta compression using up to 4 threads

Compressing objects: 100% (3/3), done.

Writing objects: 100% (3/3), 368 bytes | 368.00 KiB/s, done.

Total 3 (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/vivekmore2001/Docker\_remote/pull/new/release

remote:

To github.com:vivekmore2001/Docker\_remote.git

\* [new branch] release -> release

Branch 'release' set up to track remote branch 'release' from 'origin'.

# 03. 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@DESKTOP-PDOJQQA:Docker\_remote# docker image save vivekmore5292/vivek\_cloudethix\_redis:v1 -o redis.tar

# root@DESKTOP-PDOJQQA:Docker\_remote# docker image save vivekmore5292/vivek\_cloudethix\_redis:v3 -o redis3.tar

# root@DESKTOP-PDOJQQA:Docker\_remote# ll

# total 277720

# drwxr-xr-x 3 root root 4096 Jan 19 13:21 ./

# drwx------ 15 root root 4096 Jan 19 13:16 ../

# drwxr-xr-x 8 root root 4096 Jan 19 13:14 .git/

# -rw-r--r-- 1 root root 6 Jan 19 13:14 Dockerfile

# -rw-r--r-- 1 root root 30 Jan 19 11:40 README.md

# -rw-r--r-- 1 root root 85 Jan 19 11:40 index.html

# -rw------- 1 root root 142179328 Jan 19 13:21 redis.tar

# -rw------- 1 root root 142179328 Jan 19 13:20 redis3.tar

# root@DESKTOP-PDOJQQA:Docker\_remote# docker image rm vivekmore5292/vivek\_cloudethix\_redis:v1

# Untagged: vivekmore5292/vivek\_cloudethix\_redis:v1

# root@DESKTOP-PDOJQQA:Docker\_remote# docker image rm vivekmore5292/vivek\_cloudethix\_redis:v3

# Untagged: vivekmore5292/vivek\_cloudethix\_redis:v3

# Untagged: vivekmore5292/vivek\_cloudethix\_redis@sha256:5d5d31a84c7fec11a3c8a29b04b1712f650a98338f6a51152de42459ea24060b

# root@DESKTOP-PDOJQQA:Docker\_remote# docker image ls

# REPOSITORY TAG IMAGE ID CREATED SIZE

# linuxvm v1 6601d9cee435 About an hour ago 187MB

# my\_image ngin 6601d9cee435 About an hour ago 187MB

root@DESKTOP-PDOJQQA:Docker\_remote# **tar -cvzf redis.tar.bz2 redis.tar redis3.tar**

redis.tar

redis3.tar

root@DESKTOP-PDOJQQA:Docker\_remote# ll

total 375792

drwxr-xr-x 3 root root 4096 Jan 19 13:25 ./

drwx------ 15 root root 4096 Jan 19 13:16 ../

drwxr-xr-x 8 root root 4096 Jan 19 13:14 .git/

-rw-r--r-- 1 root root 6 Jan 19 13:14 Dockerfile

-rw-r--r-- 1 root root 30 Jan 19 11:40 README.md

-rw-r--r-- 1 root root 85 Jan 19 11:40 index.html

-rw------- 1 root root 142179328 Jan 19 13:21 redis.tar

-rw-r--r-- 1 root root 100423630 Jan 19 13:25 redis.tar.bz2

-rw------- 1 root root 142179328 Jan 19 13:20 redis3.tar

root@DESKTOP-PDOJQQA:Docker\_remote# **rm -rf redis1.tar redis3.tar**

root@DESKTOP-PDOJQQA:Docker\_remote# **git status**

On branch main

Your branch is up to date with 'origin/main'.

Untracked files:

(use "git add <file>..." to include in what will be committed)

redis.tar

redis.tar.bz2

nothing added to commit but untracked files present (use "git add" to track)

root@DESKTOP-PDOJQQA:Docker\_remote# git add .

root@DESKTOP-PDOJQQA:Docker\_remote# git commit -m "backup redis tar"

[main eb5762d] backup redis tar

2 files changed, 0 insertions(+), 0 deletions(-)

create mode 100644 redis.tar

create mode 100644 redis.tar.bz2

root@DESKTOP-PDOJQQA:Docker\_remote# git push origin main

root@DESKTOP-PDOJQQA:Docker\_remote# tar -xvf redis.tar.bz2

redis.tar

redis3.tar

root@DESKTOP-PDOJQQA:Docker\_remote# **docker image load -i redis.tar**

Loaded image: vivekmore5292/vivek\_cloudethix\_redis:v1

root@DESKTOP-PDOJQQA:Docker\_remote# **docker image load -i redis3.tar**

Loaded image: vivekmore5292/vivek\_cloudethix\_redis:v3

root@DESKTOP-PDOJQQA:Docker\_remote# **docker images**

REPOSITORY TAG IMAGE ID CREATED SIZE

vivekmore5292/vivek\_cloudethix\_nginx latest 6601d9cee435 2 hours ago 187MB

vivekmore5292/local\_app\_images latest 338075de0bc0 9 days ago 584MB

vivekmore5292/vivek\_cloudethix\_redis v1 bdff4838c172 9 days ago 138MB

vivekmore5292/vivek\_cloudethix\_redis v3 bdff4838c172 9 days ago 138MB

# 04. Pull the Busy-box image to your local system, tag it, and push it to the Docker Hub repository "yourname\_cloudethix\_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\_cloudethix\_busybox" Docker Hub repository.

# root@DESKTOP-PDOJQQA:Docker\_remote# docker image pull busybox

# Using default tag: latest

# latest: Pulling from library/busybox

# 9ad63333ebc9: Pull complete

# Digest: sha256:3d3698b745b0c67ddf2c515650b42955b0bcd123c92060008aae4f4aac1c77b3

# Status: Downloaded newer image for busybox:latest

# docker.io/library/busybox:latest

# root@DESKTOP-PDOJQQA:Docker\_remote# docker images

# busybox latest 3f57d9401f8d 35 hours ago 4.26MB

# root@DESKTOP-PDOJQQA:Docker\_remote# docker image tag busybox:latest vivekmore5292/vivek\_cloudethix\_busybox

# root@DESKTOP-PDOJQQA:Docker\_remote# docker image tag busybox:latest vivekmore5292/vivek\_cloudethix\_busybox:v1

# root@DESKTOP-PDOJQQA:Docker\_remote# docker images

# REPOSITORY TAG IMAGE ID CREATED SIZE

# busybox latest 3f57d9401f8d 35 hours ago 4.26MB

# vivekmore5292/vivek\_cloudethix\_busybox latest 3f57d9401f8d 35 hours ago 4.26MB

# vivekmore5292/vivek\_cloudethix\_busybox v1 3f57d9401f8d 35 hours ago 4.26MB

# root@DESKTOP-PDOJQQA:Docker\_remote# docker push vivekmore5292/vivek\_cloudethix\_busybox:v1

# The push refers to repository [docker.io/vivekmore5292/vivek\_cloudethix\_busybox]

# 2e112031b4b9: Mounted from library/busybox

# v1: digest: sha256:d319b0e3e1745e504544e931cde012fc5470eba649acc8a7b3607402942e5db7 size: 527

# root@DESKTOP-PDOJQQA:Docker\_remote# docker save -o busybox.tar busybox:latest

# root@DESKTOP-PDOJQQA:Docker\_remote# docker image load -i busybox.tar

# Loaded image: busybox:latest

# root@DESKTOP-PDOJQQA:Docker\_remote# docker image tag busybox:latest vivekmore5292/vivek\_cloudethix\_busybox:v2

# root@DESKTOP-PDOJQQA:Docker\_remote# docker push vivekmore5292/vivek\_cloudethix\_busybox:v2

# The push refers to repository [docker.io/vivekmore5292/vivek\_cloudethix\_busybox]

# 2e112031b4b9: Layer already exists

# v2: digest: sha256:d319b0e3e1745e504544e931cde012fc5470eba649acc8a7b3607402942e5db7 size: 527

# 

# 05. Dockerfile creation: Create a simple Dockerfile to build a custom image with the following specifications:       1. Base image: Ubuntu       2. Install packages: curl, vim, and git          3. Set an environment variable: MY\_NAME=Your\_Name       4. Build the custom image using docker build and list all available images using docker images.

# root@DESKTOP-PDOJQQA:Docker\_remote# vi Dockerfile

# root@DESKTOP-PDOJQQA:Docker\_remote# docker build -t my\_imag:ubuntu1 .

# [+] Building 58.3s (9/9) FINISHED docker:default

# => [internal] load .dockerignore 0.0s

# => => transferring context: 2B 0.0s

# => [internal] load build definition from Dockerfile 0.0s

# => => transferring dockerfile: 160B 0.0s

# => [internal] load metadata for docker.io/library/ubuntu:latest 0.0s

# => [1/5] FROM docker.io/library/ubuntu:latest 0.0s

# => [2/5] RUN apt update 9.0s

# => [3/5] RUN apt install curl -y 15.1s

# => [4/5] RUN apt install vim -y 11.6s

# => [5/5] RUN apt install git -y 21.1s

# => exporting to image 1.1s

# => => exporting layers 1.0s

# => => writing image sha256:053a49b50463820270c63e4ff0760215ffa48b2bfa9f77147ec8a80d0fc76c75 0.0s

# => => naming to docker.io/library/my\_imag:ubuntu1 0.0s

# root@DESKTOP-PDOJQQA:Docker\_remote# docker images

# REPOSITORY TAG IMAGE ID CREATED SIZE

# my\_imag ubuntu1 053a49b50463 5 seconds ago 261MB