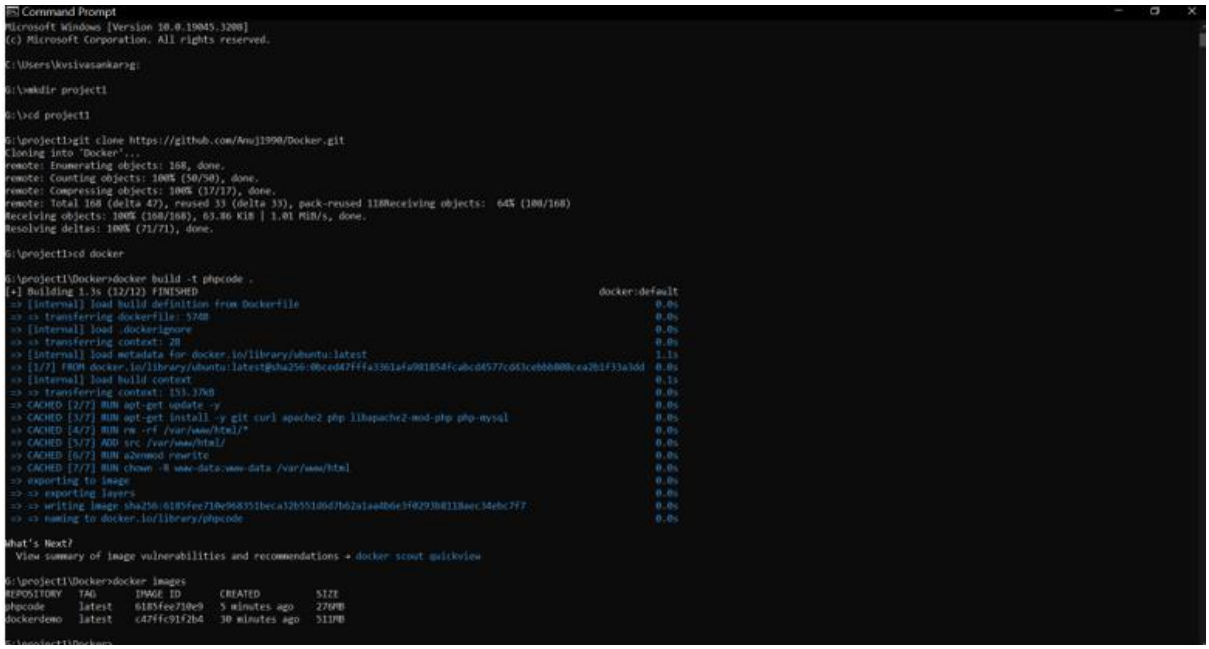
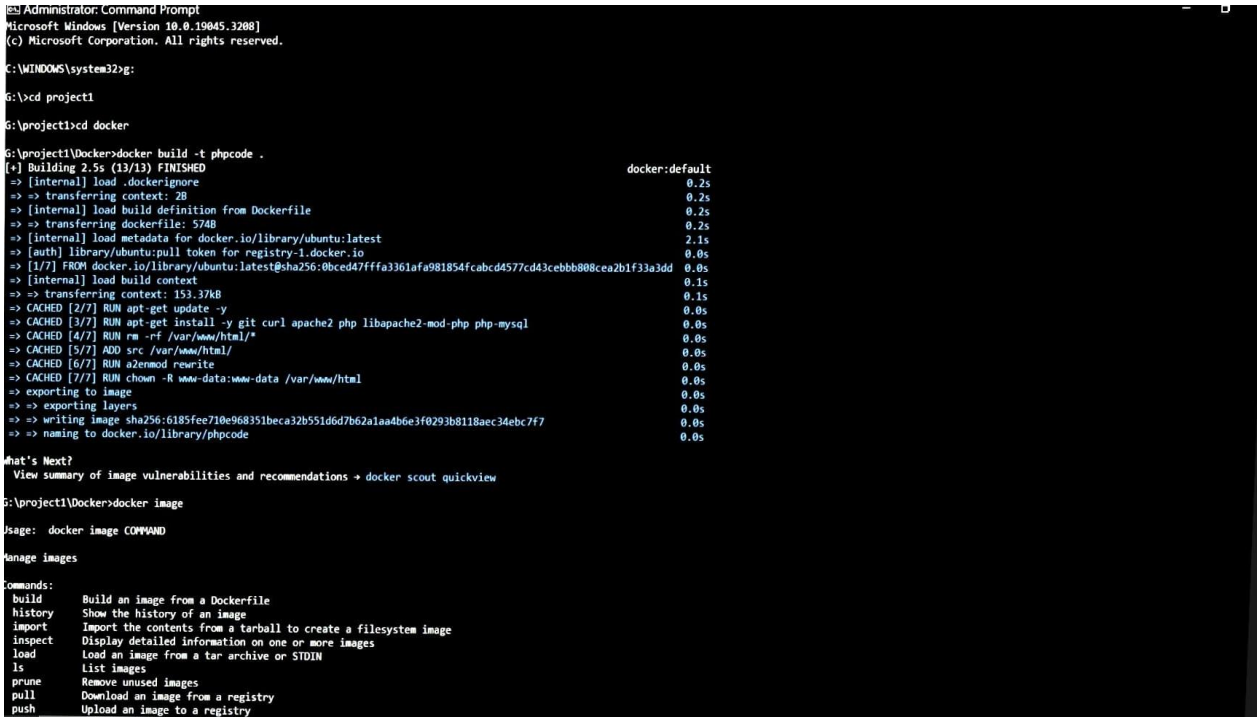
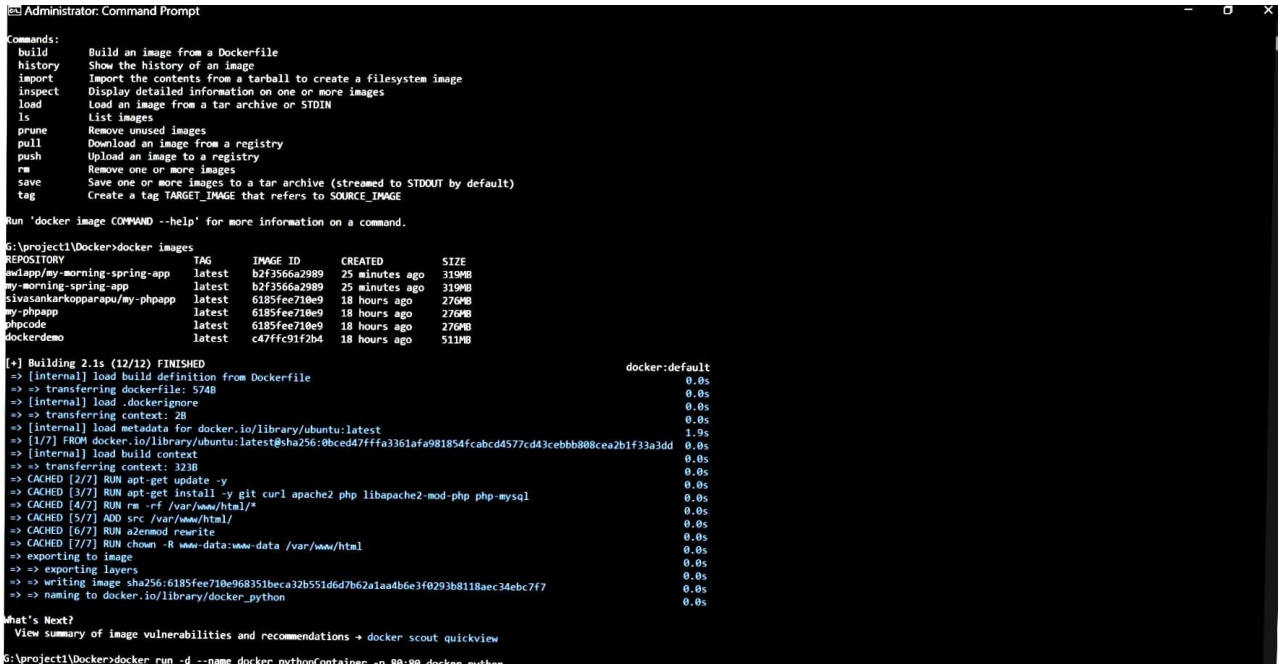
Assisted Practice Project3-

Problem 1

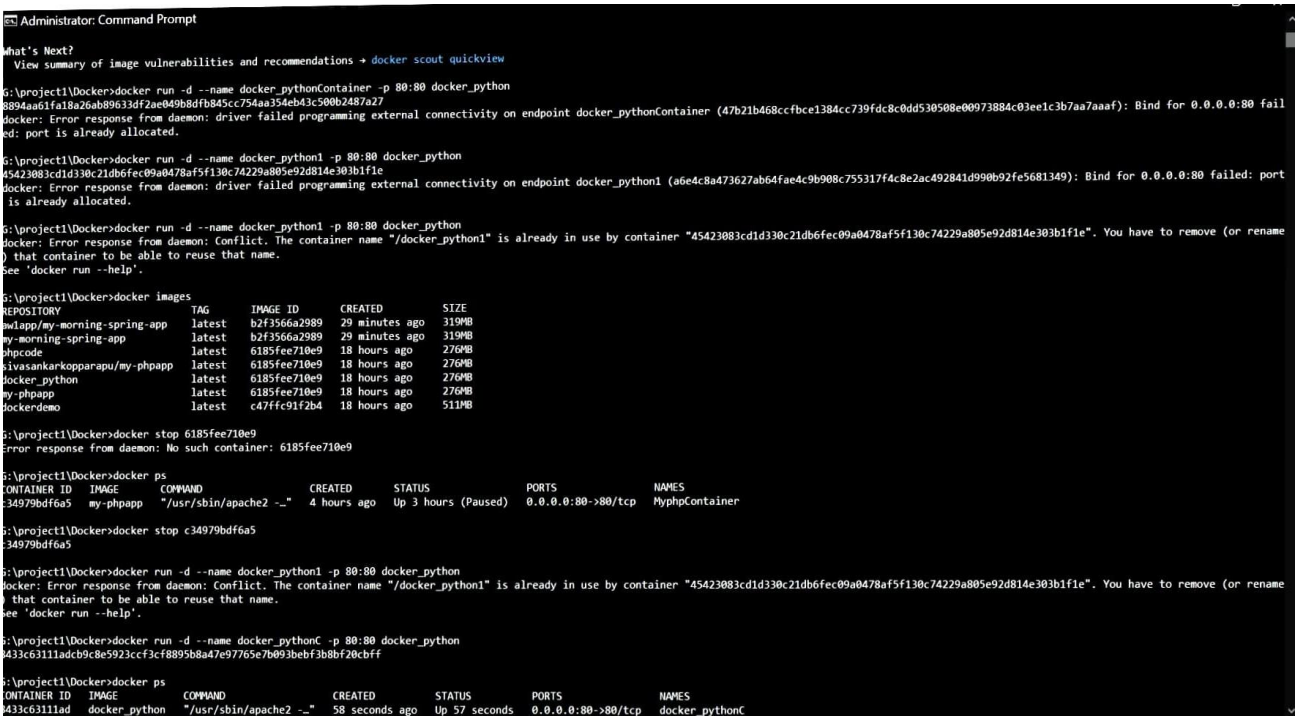


Problem 2

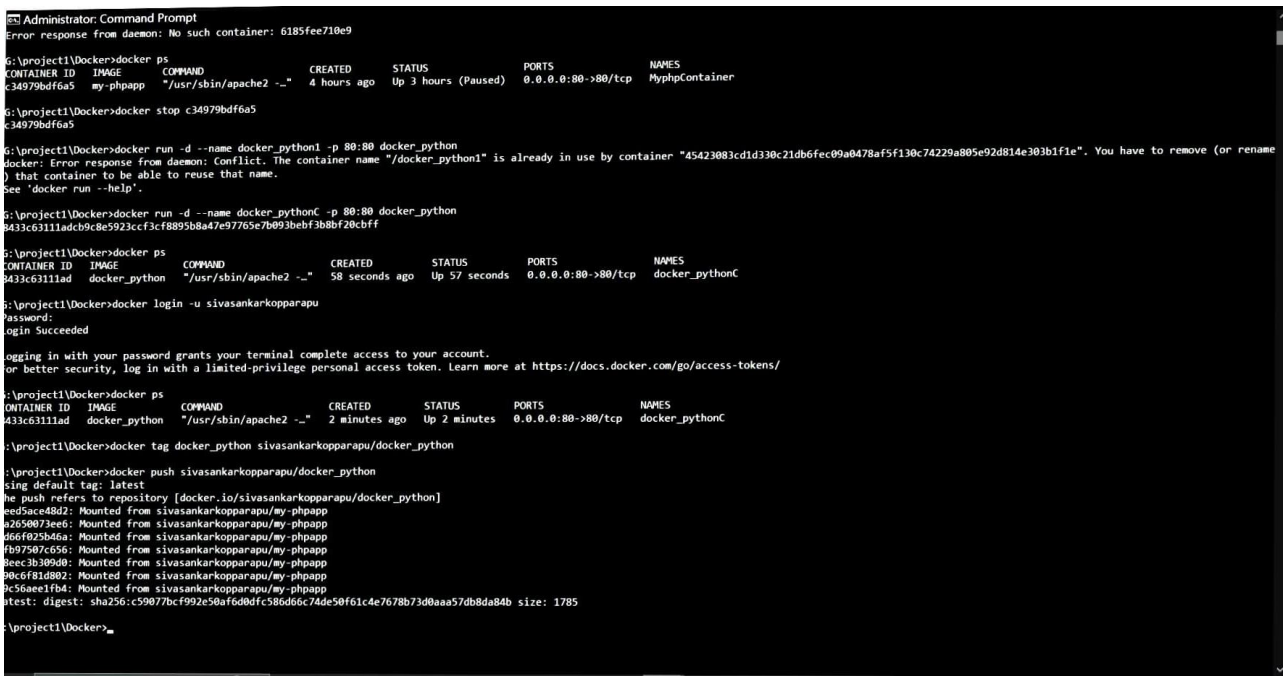


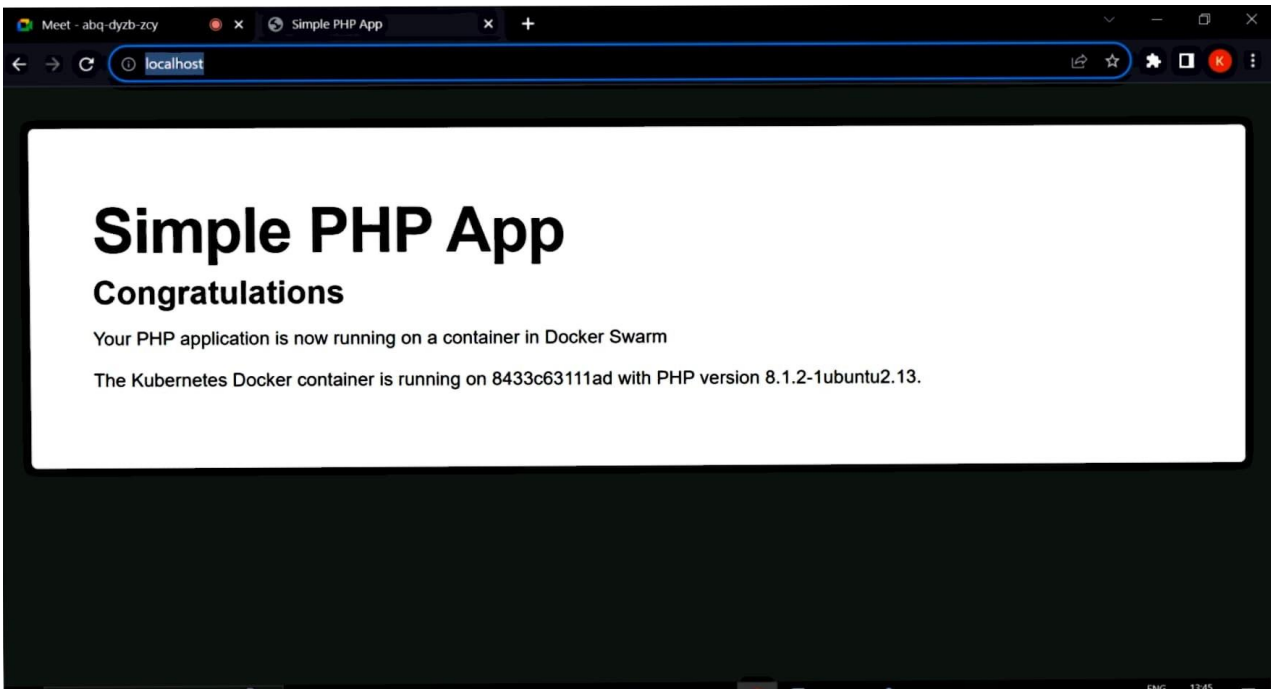


```
Administrator: Command Prompt

Commands:
  build       Build an image from a Dockerfile
  history     Show the history of an image
  import      Import the contents from a tarball to create a filesystem image
  inspect     Display detailed information on one or more images
  load        Load an image from a tar archive or STDIN
  ls          List images
  prune       Remove unused images
  pull        Download an image from a registry
  push        Upload an image to a registry
  rm          Remove one or more images
  save        Save one or more images to a tar archive (streamed to STDOUT by default)
  tag         Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE

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

G:\project1\Docker>docker images
REPOSITORY                          TAG       IMAGE ID       CREATED          SIZE
aw1app/my-morning-spring-app        latest    b2f3566a2989   25 minutes ago   319MB
my-morning-spring-app               latest    b2f3566a2989   25 minutes ago   319MB
sivasankarkopparapu/my-phpapp       latest    6185fee710e9   18 hours ago     276MB
my-phpapp                           latest    6185fee710e9   18 hours ago     276MB
phpcode                             latest    6185fee710e9   18 hours ago     276MB
dockerdemo                          latest    c47ffc91f2b4   18 hours ago     511MB

[+] Building 2.1s (12/12) FINISHED                                                                                  docker:default
 => [internal] load build definition from Dockerfile                                                                         0.0s
 => => transferring dockerfile: 574B                                                                                         0.0s
 => [internal] load .dockerignore                                                                                            0.0s
 => => transferring context: 2B                                                                                              0.0s
 => [internal] load metadata for docker.io/library/ubuntu:latest                                                             1.9s
 => [1/7] FROM docker.io/library/ubuntu:latest@sha256:0bced47fffa3361afa981854fcabcd4577cd43cebbb808cea2b1f33a3dd            0.0s
 => [internal] load build context                                                                                            0.0s
 => => transferring context: 323B                                                                                            0.0s
 => CACHED [2/7] RUN apt-get update -y                                                                                       0.0s
 => CACHED [3/7] RUN apt-get install -y git curl apache2 php libapache2-mod-php php-mysql                                    0.0s
 => CACHED [4/7] RUN rm -rf /var/www/html/*                                                                                  0.0s
 => CACHED [5/7] ADD src /var/www/html/                                                                                      0.0s
 => CACHED [6/7] RUN a2enmod rewrite                                                                                         0.0s
 => CACHED [7/7] RUN chown -R www-data:www-data /var/www/html                                                                0.0s
 => exporting to image                                                                                                       0.0s
 => => exporting layers                                                                                                      0.0s
 => => writing image sha256:6185fee710e968351beca32b551d6d7b62a1aa4b6e3f0293b8118aec34ebc7f7                                 0.0s
 => => naming to docker.io/library/docker_python                                                                             0.0s

What's Next?
  View summary of image vulnerabilities and recommendations → docker scout quickview

G:\project1\Docker>docker run -d --name docker_pythonContainer -p 80:80 docker_python
```



```
Administrator: Command Prompt

What's Next?
  View summary of image vulnerabilities and recommendations → docker scout quickview

G:\project1\Docker>docker run -d --name docker_pythonContainer -p 80:80 docker_python
8894aa61fa18a26ab89633df2ae049b8dfb845cc754aa354eb43c500b2487a27
docker: Error response from daemon: driver failed programming external connectivity on endpoint docker_pythonContainer (47b21b468ccfbce1384cc739fdc8c0dd530508e00973884c03ee1c3b7aa7aaaf): Bind for 0.0.0.0:80 fail
ed: port is already allocated.

G:\project1\Docker>docker run -d --name docker_python1 -p 80:80 docker_python
45423083cd1d330c21db6fec09a0478af5f130c74229a805e92d814e303b1f1e
docker: Error response from daemon: driver failed programming external connectivity on endpoint docker_python1 (a6e4c8a473627ab64fae4c9b908c755317f4c8e2ac492841d990b92fe5681349): Bind for 0.0.0.0:80 failed: port
 is already allocated.

G:\project1\Docker>docker run -d --name docker_python1 -p 80:80 docker_python
docker: Error response from daemon: Conflict. The container name "/docker_python1" is already in use by container "45423083cd1d330c21db6fec09a0478af5f130c74229a805e92d814e303b1f1e". You have to remove (or rename
) that container to be able to reuse that name.
See 'docker run --help'.

G:\project1\Docker>docker images
REPOSITORY                          TAG       IMAGE ID       CREATED          SIZE
aw1app/my-morning-spring-app        latest    b2f3566a2989   29 minutes ago   319MB
my-morning-spring-app               latest    b2f3566a2989   29 minutes ago   319MB
phpcode                             latest    6185fee710e9   18 hours ago     276MB
sivasankarkopparapu/my-phpapp       latest    6185fee710e9   18 hours ago     276MB
docker_python                       latest    6185fee710e9   18 hours ago     276MB
my-phpapp                           latest    6185fee710e9   18 hours ago     276MB
dockerdemo                          latest    c47ffc91f2b4   18 hours ago     511MB

G:\project1\Docker>docker stop 6185fee710e9
Error response from daemon: No such container: 6185fee710e9

G:\project1\Docker>docker ps
CONTAINER ID   IMAGE       COMMAND                  CREATED       STATUS                PORTS                NAMES
c34979bdf6a5   my-phpapp   "/usr/sbin/apache2 -…"   4 hours ago   Up 3 hours (Paused)   0.0.0.0:80->80/tcp   MyphpContainer

G:\project1\Docker>docker stop c34979bdf6a5
c34979bdf6a5

G:\project1\Docker>docker run -d --name docker_python1 -p 80:80 docker_python
docker: Error response from daemon: Conflict. The container name "/docker_python1" is already in use by container "45423083cd1d330c21db6fec09a0478af5f130c74229a805e92d814e303b1f1e". You have to remove (or rename
) that container to be able to reuse that name.
See 'docker run --help'.

G:\project1\Docker>docker run -d --name docker_pythonC -p 80:80 docker_python
0433c63111adcb9c8e5923ccf3cf8895b8a47e97765e7b093bebf3b8bf20cbff

G:\project1\Docker>docker ps
CONTAINER ID   IMAGE           COMMAND                  CREATED          STATUS          PORTS                NAMES
0433c63111ad   docker_python   "/usr/sbin/apache2 -…"   58 seconds ago   Up 57 seconds   0.0.0.0:80->80/tcp   docker_pythonC
```


Administrator: Command Prompt
Error response from daemon: No such container: 6185fee710e9
G:\project1\Docker>docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
c34979bdf6a5 my-phpapp "/usr/sbin/apache2 -…" 4 hours ago Up 3 hours (Paused) 0.0.0.0:80->80/tcp MyphpContainer
G:\project1\Docker>docker stop c34979bdf6a5
c34979bdf6a5
G:\project1\Docker>docker run -d --name docker_python1 -p 80:80 docker_python
docker: Error response from daemon: Conflict. The container name "/docker_python1" is already in use by container "45423083cd1d330c21db6fec09a0478af5f130c74229a805e92d814e303b1f1e". You have to remove (or rename
) that container to be able to reuse that name.
See 'docker run --help'.
G:\project1\Docker>docker run -d --name docker_pythonC -p 80:80 docker_python
8433c63111adcb9c8e5923ccf3cf8895b8a47e97765e7b093bebf3b8bf20cbff
G:\project1\Docker>docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
8433c63111ad docker_python "/usr/sbin/apache2 -…" 58 seconds ago Up 57 seconds 0.0.0.0:80->80/tcp docker_pythonC
G:\project1\Docker>docker login -u sivasankarkopparapu
Password:
Login Succeeded
Logging in with your password grants your terminal complete access to your account.
For better security, log in with a limited-privilege personal access token. Learn more at https://docs.docker.com/go/access-tokens/
G:\project1\Docker>docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
8433c63111ad docker_python "/usr/sbin/apache2 -…" 2 minutes ago Up 2 minutes 0.0.0.0:80->80/tcp docker_pythonC
G:\project1\Docker>docker tag docker_python sivasankarkopparapu/docker_python
G:\project1\Docker>docker push sivasankarkopparapu/docker_python
Using default tag: latest
The push refers to repository [docker.io/sivasankarkopparapu/docker_python]
eed5ace48d2: Mounted from sivasankarkopparapu/my-phpapp
a2650073ee6: Mounted from sivasankarkopparapu/my-phpapp
d66f025b46a: Mounted from sivasankarkopparapu/my-phpapp
fb97507c656: Mounted from sivasankarkopparapu/my-phpapp
8eec3b309d0: Mounted from sivasankarkopparapu/my-phpapp
90c6f81d802: Mounted from sivasankarkopparapu/my-phpapp
9c56aee1fb4: Mounted from sivasankarkopparapu/my-phpapp
latest: digest: sha256:c59077bcf992e50af6d0dfc586d66c74de50f61c4e7678b73d0aaa57db8da84b size: 1785
G:\project1\Docker>


Meet - abq-dyzb-zcy
Simple PHP App
localhost
Simple PHP App
Congratulations
Your PHP application is now running on a container in Docker Swarm
The Kubernetes Docker container is running on 8433c63111ad with PHP version 8.1.2-1ubuntu2.13.

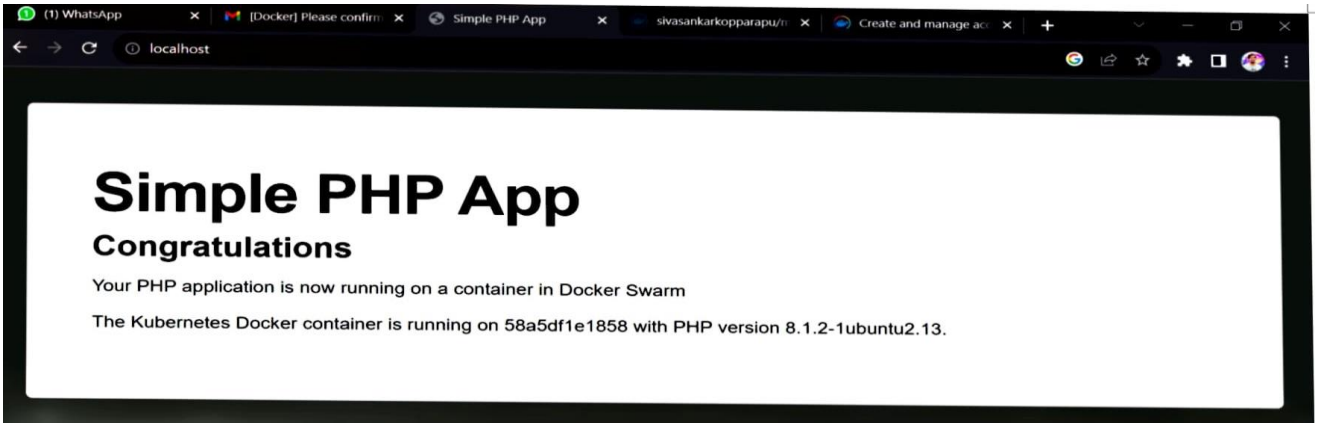
Problem 3

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.19045.3208]
(c) Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>f:

F:\>mrngproject1
'mrngproject1' is not recognized as an internal or external command,
operable program or batch file.

F:\>cd mrngproject1

F:\mrngproject1>cd docker

F:\mrngproject1\Docker>docker login -u sivasankarkopparapu
Password:
Login Succeeded

Logging in with your password grants your terminal complete access to your account.
For better security, log in with a limited-privilege personal access token. Learn more at https://docs.docker.com/go/access-tokens/

F:\mrngproject1\Docker>docker swarm init
Error response from daemon: This node is already part of a swarm. Use "docker swarm leave" to leave this swarm and join another one.

F:\mrngproject1\Docker>docker swarm leave
Error response from daemon: You are attempting to leave the swarm on a node that is participating as a manager. Removing the last manager erases all current state of the swarm. Use `--force` to ignore this messa
ge.

F:\mrngproject1\Docker>docker swarm leave --force
Node left the swarm.

F:\mrngproject1\Docker>docker swarm init
Swarm initialized: current node (vbkeczfs2q491dbg8azyghden) is now a manager.

To add a worker to this swarm, run the following command:

    docker swarm join --token SWMTKN-1-0atbp90vrl4z3e3404ukp32kaerk0zhjnfg0co9gztv3cavlme-auk5jh74vuidtdtqjaqyu3ogw 192.168.65.4:2377

To add a manager to this swarm, run 'docker swarm join-token manager' and follow the instructions.


F:\mrngproject1\Docker>docker service create -p 80:80 --name webserver my-phpapp
Image my-phpapp:latest could not be accessed on a registry to record
its digest. Each node will access my-phpapp:latest independently,
possibly leading to different nodes running different
versions of the image.

v57rq211jgy474m44uf1foftj
Overall progress: 1 out of 1 tasks
1/1: running   [==================================================>]
Verify: Service converged
```

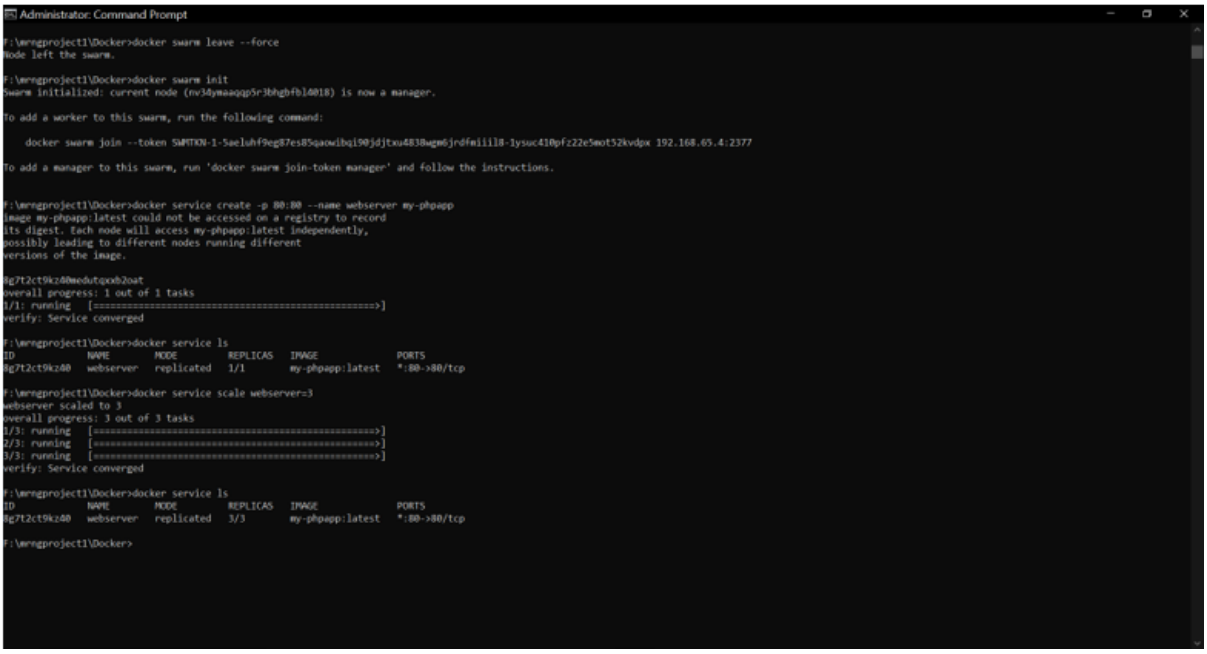
```
Administrator: Command Prompt
1/1: running   [==================================================>]
verify: Service converged

F:\mrngproject1\Docker>docker service ls
ID             NAME        MODE         REPLICAS   IMAGE              PORTS
v57rq211jgy4   webserver   replicated   1/1        my-phpapp:latest   *:80->80/tcp

F:\mrngproject1\Docker>docker node ls
ID                            HOSTNAME         STATUS    AVAILABILITY   MANAGER STATUS   ENGINE VERSION
vbkeczfs2q491dbg8azyghden *   docker-desktop   Ready     Active         Leader           24.0.2

F:\mrngproject1\Docker>docker service scale=2 webserve

Usage:  docker service COMMAND

Manage Swarm services

Commands:
  create      Create a new service
  inspect     Display detailed information on one or more services
  logs        Fetch the logs of a service or task
  ls          List services
  ps          List the tasks of one or more services
  rm          Remove one or more services
  rollback    Revert changes to a service's configuration
  scale       Scale one or multiple replicated services
  update      Update a service

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

F:\mrngproject1\Docker>docker service ls
ID             NAME        MODE         REPLICAS   IMAGE              PORTS
v57rq211jgy4   webserver   replicated   1/1        my-phpapp:latest   *:80->80/tcp

F:\mrngproject1\Docker>docker service scale=2 webserver

Usage:  docker service COMMAND

Manage Swarm services

Commands:
  create      Create a new service
  inspect     Display detailed information on one or more services
  logs        Fetch the logs of a service or task
  ls          List services
  ps          List the tasks of one or more services
  rm          Remove one or more services
  rollback    Revert changes to a service's configuration
  scale       Scale one or multiple replicated services
  update      Update a service
```

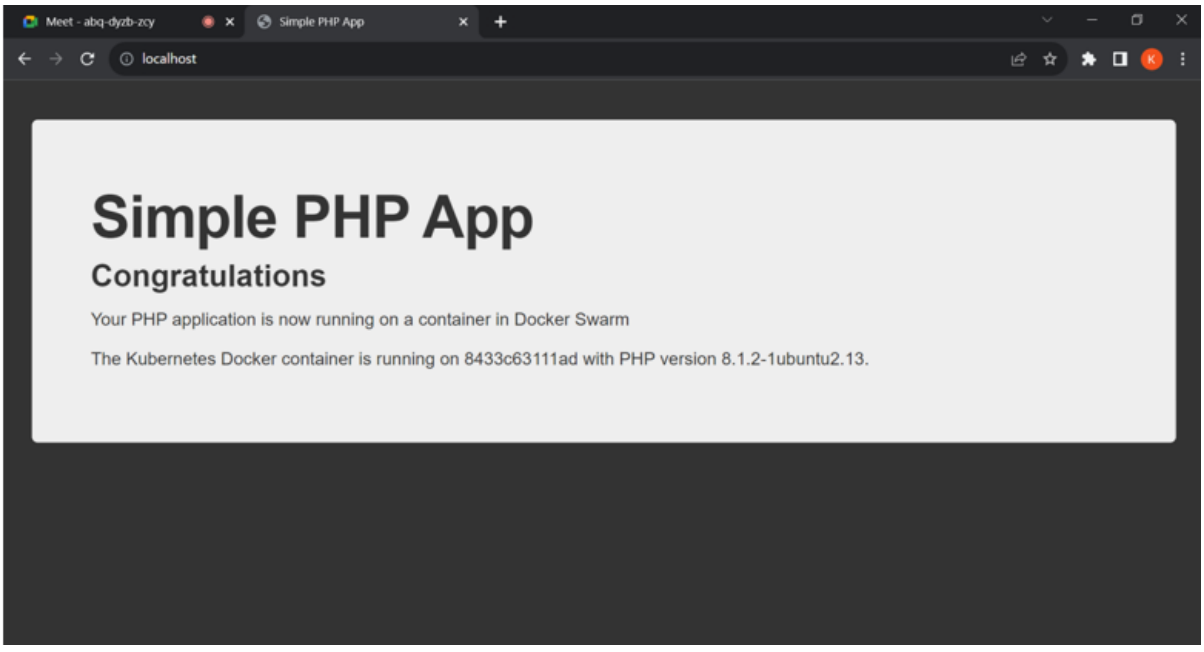
```
Administrator: Command Prompt
  inspect     Display detailed information on one or more services
  logs        Fetch the logs of a service or task
  ls          List services
  ps          List the tasks of one or more services
  rm          Remove one or more services
  rollback    Revert changes to a service's configuration
  scale       Scale one or multiple replicated services
  update      Update a service

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

F:\mrngproject1\Docker>docker service scale=2 webserver

Usage:  docker service COMMAND

Manage Swarm services

Commands:
  create      Create a new service
  inspect     Display detailed information on one or more services
  logs        Fetch the logs of a service or task
  ls          List services
  ps          List the tasks of one or more services
  rm          Remove one or more services
  rollback    Revert changes to a service's configuration
  scale       Scale one or multiple replicated services
  update      Update a service

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

F:\mrngproject1\Docker>docker service ls
ID             NAME        MODE         REPLICAS   IMAGE              PORTS
v57rq211jgy4   webserver   replicated   1/1        my-phpapp:latest   *:80->80/tcp

F:\mrngproject1\Docker>docker node ls
ID                            HOSTNAME         STATUS    AVAILABILITY   MANAGER STATUS   ENGINE VERSION
vbkeczfs2q491dbg8azyghden *   docker-desktop   Ready     Active         Leader           24.0.2

F:\mrngproject1\Docker>docker service scale webserver=2
webserver scaled to 2
overall progress: 2 out of 2 tasks
1/2: running   [==================================================>]
2/2: running   [==================================================>]
verify: Service converged

F:\mrngproject1\Docker>docker service ls
ID             NAME        MODE         REPLICAS   IMAGE              PORTS
v57rq211jgy4   webserver   replicated   2/2        my-phpapp:latest   *:80->80/tcp

F:\mrngproject1\Docker>docker node ls
```

```
Administrator: Command Prompt
Manage Swarm services

Commands:
  create      Create a new service
  inspect     Display detailed information on one or more services
  logs        Fetch the logs of a service or task
  ls          List services
  ps          List the tasks of one or more services
  rm          Remove one or more services
  rollback    Revert changes to a service's configuration
  scale       Scale one or multiple replicated services
  update      Update a service

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

F:\mrngproject1\Docker>docker service ls
ID             NAME        MODE         REPLICAS   IMAGE              PORTS
v57rq211jgy4   webserver   replicated   1/1        my-phpapp:latest   *:80->80/tcp

F:\mrngproject1\Docker>docker node ls
ID                            HOSTNAME         STATUS    AVAILABILITY   MANAGER STATUS   ENGINE VERSION
vbkeczfs2q491dbg8azyghden *   docker-desktop   Ready     Active         Leader           24.0.2

F:\mrngproject1\Docker>docker service scale webserver=2
webserver scaled to 2
overall progress: 2 out of 2 tasks
1/2: running   [==================================================>]
2/2: running   [==================================================>]
verify: Service converged

F:\mrngproject1\Docker>docker service ls
ID             NAME        MODE         REPLICAS   IMAGE              PORTS
v57rq211jgy4   webserver   replicated   2/2        my-phpapp:latest   *:80->80/tcp

F:\mrngproject1\Docker>docker node ls
ID                            HOSTNAME         STATUS    AVAILABILITY   MANAGER STATUS   ENGINE VERSION
vbkeczfs2q491dbg8azyghden *   docker-desktop   Ready     Active         Leader           24.0.2

F:\mrngproject1\Docker>
```

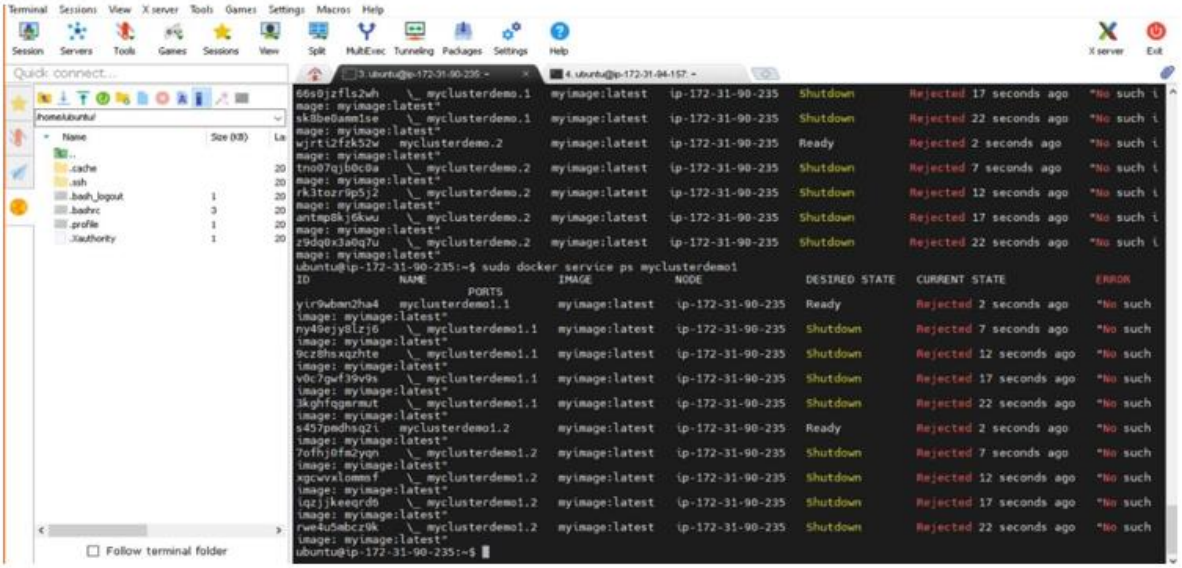


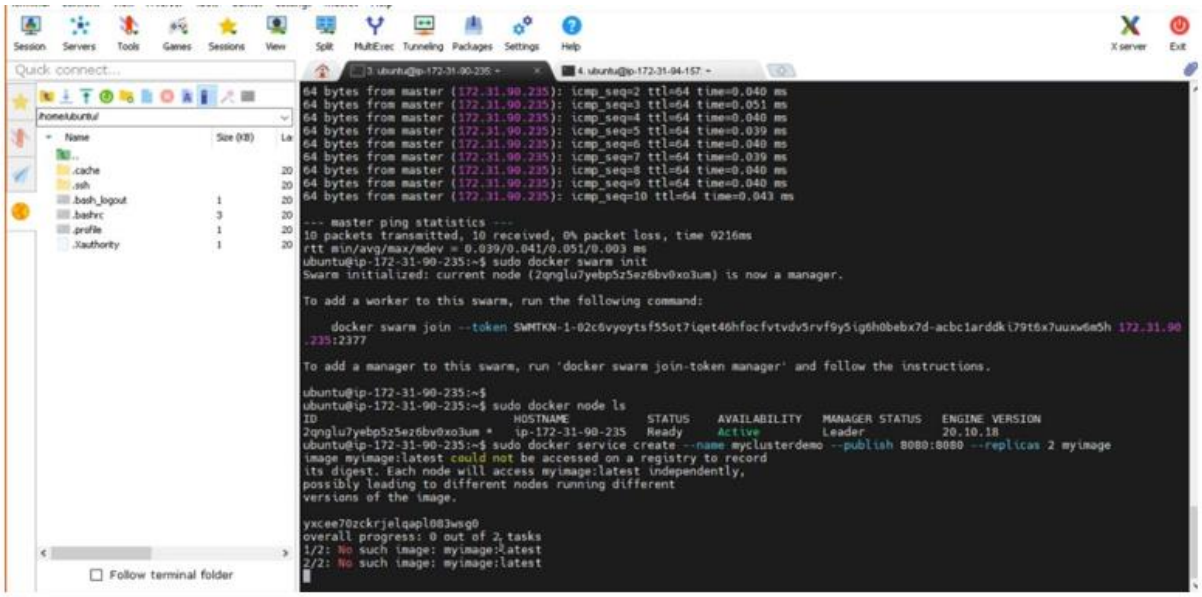
Problem 4



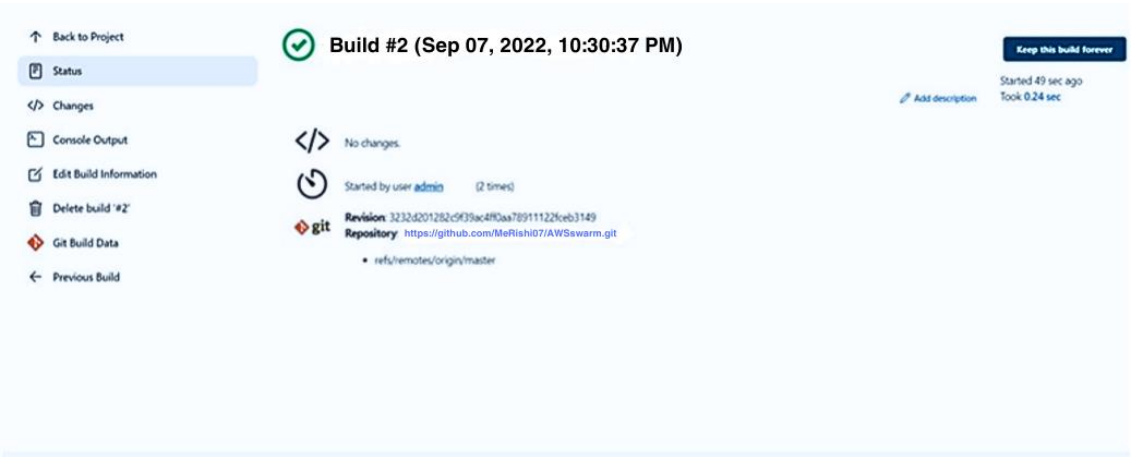


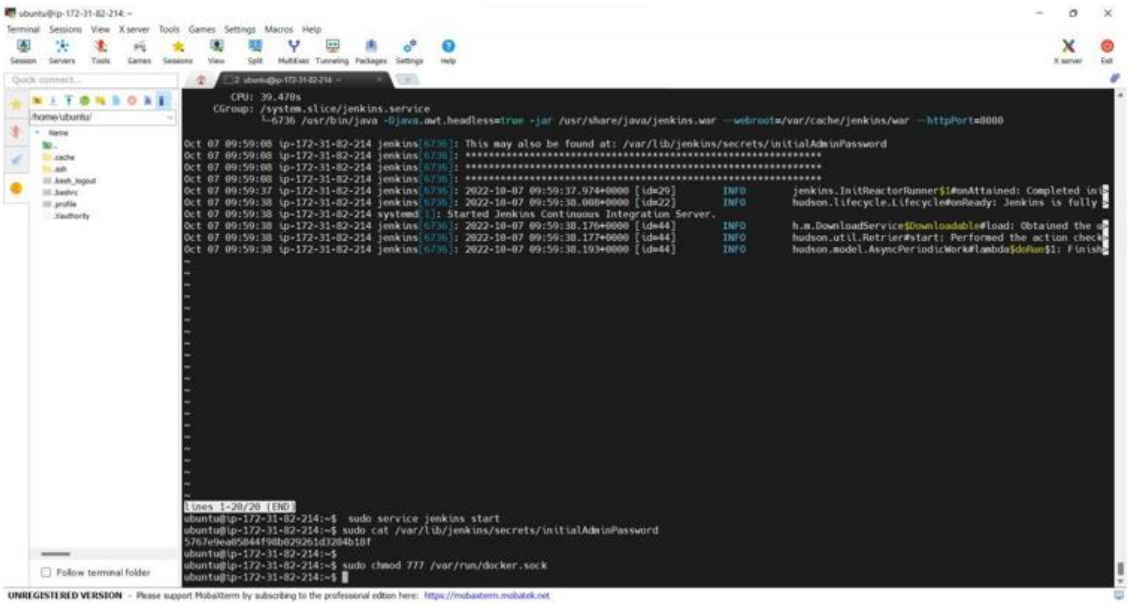
Problem 5


Terminal Sessions View X server Tools Games Settings Macros Help
Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help X server Exit
Quick connect...
Follow terminal folder
ubuntu@ip-172-31-90-235:~$ sudo docker service ps myclusterdemo1
ID NAME PORTS IMAGE NODE DESIRED STATE CURRENT STATE ERROR
ubuntu@ip-172-31-90-235:~$


Session Servers Tools Games Sessions View Split MultiExec Tunneling Packages Settings Help X server Exit
Quick connect...
Follow terminal folder
64 bytes from master (172.31.90.235): icmp_seq=1 ttl=64 time=0.040 ms
64 bytes from master (172.31.90.235): icmp_seq=2 ttl=64 time=0.051 ms
64 bytes from master (172.31.90.235): icmp_seq=3 ttl=64 time=0.051 ms
64 bytes from master (172.31.90.235): icmp_seq=4 ttl=64 time=0.040 ms
64 bytes from master (172.31.90.235): icmp_seq=5 ttl=64 time=0.039 ms
64 bytes from master (172.31.90.235): icmp_seq=6 ttl=64 time=0.040 ms
64 bytes from master (172.31.90.235): icmp_seq=7 ttl=64 time=0.039 ms
64 bytes from master (172.31.90.235): icmp_seq=8 ttl=64 time=0.040 ms
64 bytes from master (172.31.90.235): icmp_seq=9 ttl=64 time=0.040 ms
64 bytes from master (172.31.90.235): icmp_seq=10 ttl=64 time=0.043 ms
--- master ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9216ms
rtt min/avg/max/mdev = 0.039/0.041/0.051/0.003 ms
ubuntu@ip-172-31-90-235:~$ sudo docker swarm init
Swarm initialized: current node (2qnglu7yebp5z5ez6bv0xo3um) is now a manager.
To add a worker to this swarm, run the following command:
docker swarm join --token SWMTKN-1-02c6vyoytsf55ot7iqet46hfocfvtvdv5rvf9y5ig6h0bebx7d-acbc1arddkl79t6x7uuxw6m5h 172.31.90.235:2377
To add a manager to this swarm, run 'docker swarm join-token manager' and follow the instructions.
ubuntu@ip-172-31-90-235:~$
ubuntu@ip-172-31-90-235:~$ sudo docker node ls
ID HOSTNAME STATUS AVAILABILITY MANAGER STATUS ENGINE VERSION
2qnglu7yebp5z5ez6bv0xo3um * ip-172-31-90-235 Ready Active Leader 20.10.18
ubuntu@ip-172-31-90-235:~$ sudo docker service create --name myclusterdemo --publish 8080:8080 --replicas 2 myimage
image myimage:latest could not be accessed on a registry to record
its digest. Each node will access myimage:latest independently,
possibly leading to different nodes running different
versions of the image.
yxcee70zckrjelqapl083wsg0
overall progress: 0 out of 2 tasks
1/2: No such image: myimage:latest
2/2: No such image: myimage:latest

Problem 6


Back to Project
Status
Changes
Console Output
Edit Build Information
Delete build '#2'
Git Build Data
Previous Build
Build #2 (Sep 07, 2022, 10:30:37 PM)
Keep this build forever
Started 49 sec ago
Took 0.24 sec
Add description
No changes.
Started by user admin (2 times)
Revision 3232d201282c5f39ac4ff0aa78911122fceb3149
Repository https://github.com/MeRishi07/AWSswarm.git
refs/remotes/origin/master


ubuntu@ip-172-31-82-214: ~
Terminal Sessions View X server Tools Games Settings Macros Help
CPU: 39.470s
CGroup: /system.slice/jenkins.service
└─6736 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080
Oct 07 09:59:08 ip-172-31-82-214 jenkins[6736]: This may also be found at: /var/lib/jenkins/secrets/initialAdminPassword
Oct 07 09:59:08 ip-172-31-82-214 jenkins[6736]: **
Oct 07 09:59:08 ip-172-31-82-214 jenkins[6736]: **
Oct 07 09:59:08 ip-172-31-82-214 jenkins[6736]: **
Oct 07 09:59:37 ip-172-31-82-214 jenkins[6736]: 2022-10-07 09:59:37.974+0000 [id=29] INFO jenkins.InitReactorRunner$1#onAttained: Completed in
Oct 07 09:59:38 ip-172-31-82-214 jenkins[6736]: 2022-10-07 09:59:38.008+0000 [id=22] INFO hudson.lifecycle.Lifecycle#onReady: Jenkins is fully
Oct 07 09:59:38 ip-172-31-82-214 systemd[1]: Started Jenkins Continuous Integration Server.
Oct 07 09:59:38 ip-172-31-82-214 jenkins[6736]: 2022-10-07 09:59:38.176+0000 [id=44] INFO h.m.DownloadService$Downloadable#load: Obtained the u
Oct 07 09:59:38 ip-172-31-82-214 jenkins[6736]: 2022-10-07 09:59:38.177+0000 [id=44] INFO hudson.util.Retrier#start: Performed the action check
Oct 07 09:59:38 ip-172-31-82-214 jenkins[6736]: 2022-10-07 09:59:38.193+0000 [id=44] INFO hudson.model.AsyncPeriodicWork#lambda$doRun$1: Finish
lines 1-20/20 (END)
ubuntu@ip-172-31-82-214:~$ sudo service jenkins start
ubuntu@ip-172-31-82-214:~$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
5767e9ea050444f90b0292061d3204b18f
ubuntu@ip-172-31-82-214:~$
ubuntu@ip-172-31-82-214:~$ sudo chmod 777 /var/run/docker.sock
ubuntu@ip-172-31-82-214:~$
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