Dockers commands.

1. docker --version

Checking docker availability and version

2. docker images

Checking all current available images on docker.

```
PROBLEMS
        OUTPUT DEBUG CONSOLE
                                    JUPYTER COMMENTS
                            TERMINAL
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers
$ docker images
REPOSITORY
                    TAG
                            IMAGE ID CREATED
                                                    SIZE
cube fun
                    latest
                           ba8e53fe81bd 46 hours ago
                                                    1.06GB
manuviju/cube fun
                  latest ba8e53fe81bd 46 hours ago 1.06GB
1.06GB
                                                    117MB
                                                    28.8MB
hello-world
                  latest feb5d9fea6a5 12 months ago
                                                   13.3kB
(base)
Manoj Workbook@DESKTOP-G4ED8RQ_MINGW64_/d/inuron/dockers
```

docker pull docker/getting-started

Pulling an image (here getting-started) from the docker hub

```
(base)
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers
$ docker pull docker/getting-started
Using default tag: latest
latest: Pulling from docker/getting-started
Digest: sha256:b558be874169471bd4e65bd6eac8c303b271a7ee8553ba47481b73b2bf597aae
Status: Image is up to date for docker/getting-started:latest
docker.io/docker/getting-started:latest
(base)
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers
$ $ $
```

4. docker run -d -p 80:80 docker/getting-started

Running the image from the docker providing the port number.

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER COMMENTS

(base)

Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers

$ docker run -d -p 80:80 docker/getting-started
2491270f13c0bce25567a3e5db34646d9f0b5b20b38e9184837b44a9b1a26a2b
(base)

Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers

$ ■
```

5. docker ps

Showing the current running docker container into the system

```
PROBLEMS OUTPUT DEBUG CONSOLE
                                 TERMINAL
                                           JUPYTER
                                                    COMMENTS
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers
$ docker ps
CONTAINER ID
             IMAGE
                                      COMMAND
                                                              CREATED
                                                                              STATUS
                                                                                            PORTS
                                                                                                                 NAMES
2491270f13c0 docker/getting-started
                                      "/docker-entrypoint..."
                                                              3 minutes ago Up 3 minutes 0.0.0.0:80->80/tcp mystifying_hugle
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers
```

docker stop 2491270f13c0

Stopping the running docker by docker ID and checking status

```
PROBLEMS
           OUTPUT
                    DEBUG CONSOLE
                                    TERMINAL
                                              JUPYTER
                                                        COMMENTS
(base)
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers
$ docker stop 2491270f13c0
2491270f13c0
(base)
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers
$ docker ps
CONTAINER ID
               IMAGE
                         COMMAND
                                    CREATED
                                              STATUS
                                                        PORTS
                                                                   NAMES
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers
$
```

docker rmi docker/getting-started

Trying to delete the docker image but its showing error and asking to remove forcefully.

```
(base)
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers
$ docker rmi docker/getting-started
Error response from daemon: conflict: unable to remove repository reference
"docker/getting-started" (must force) - container 2491270f13c0 is using its referenced image cb90f98fd791
(base)
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers

$ ■
```

8. docker rmi -f docker/getting-started

Deleting image from docker forcefully

```
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers
$ docker rmi -f docker/getting-started
Untagged: docker/getting-started:latest
Untagged: docker/getting-started@sha256:b558be874169471bd4e65bd6eac8c303b271a7ee8553ba47481b73b2bf597aae
Deleted: sha256:cb90f98fd791dd49f09903cef3eb2245646b4d76b093825ea78e0f7bb8fb3403
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers
$ docker images
REPOSITORY
                 TAG
                        IMAGE ID
                                       CREATED
                                                     SIZE
cube fun
                 latest ba8e53fe81bd 46 hours ago
                                                    1.06GB
manuviju/cube_fun latest ba8e53fe81bd 46 hours ago
                                                     1.06GB
                 <none>
redis
hello-world
(base)
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers
```

9. docker build -t my dockerfile.

Building docker image with a image name my_dockerfile

```
PROBLEMS
          OUTPUT
                    DEBUG CONSOLE
                                              JUPYTER
                                   TERMINAL
                                                       COMMENTS
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers/Hello World
$ docker build -t my dockerfile .
[+] Building 35.2s (10/10) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 31B
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load metadata for docker.io/library/python:3.7
=> [auth] library/python:pull token for registry-1.docker.io
=> [internal] load build context
 => => transferring context: ROSR
```

10.docker images

Here we can check the newly built image in our docker

```
Manoj Workbook@DESKTOP-G4ED8RQ_MINGW64 /d/inuron/dockers/Hello_World
$ docker images
REPOSITORY
                   TAG
                            IMAGE ID
                                          CREATED
                                                          SIZE
my dockerfile
                   latest f09350878d28 2 minutes ago
                                                          1.06GB
                   latest ba8e53fe81bd 47 hours ago
cube fun
                                                          1.06GB
manuviju/cube fun latest ba8e53fe81bd 47 hours ago
                                                          1.06GB
                   <none> dfb1a54ae209 2 days ago
latest f8528f17261c 7 days ago
<none>
                                                          1.06GB
redis
                                                          117MB
                   latest feb5d9fea6a5 12 months ago 13.3kB
hello-world
(base)
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers/Hello World
```

11. docker build -t manuviju/my_dockerfile .

Creating docker image for pushing it into docker hub.

```
DEBUG CONSOLE
PROBLEMS
          OUTPUT
                                   TERMINAL
                                             JUPYTER
                                                       COMMENTS
CONTAINER ID
              IMAGE
                         COMMAND CREATED STATUS
                                                       PORTS
                                                                 NAMES
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers/Hello World
$ docker build -t manuviju/my dockerfile .
[+] Building 3.3s (10/10) FINISHED
 => [internal] load build definition from Dockerfile
 => => transferring dockerfile: 31B
 => [internal] load .dockerignore
 => => transferring context: 2B
 => [internal] load metadata for docker.io/library/python:3.7
 => [auth] library/python:pull token for registry-1.docker.io
 => [internal] load build context
 => => transferring context: 116B
 => [1/4] FROM docker.io/library/python:3.7@sha256:51dcbb98ba807f3631366d5a06
 => CACHED [2/4] COPY . /app
```

We can see the file is created under the docker repository name.

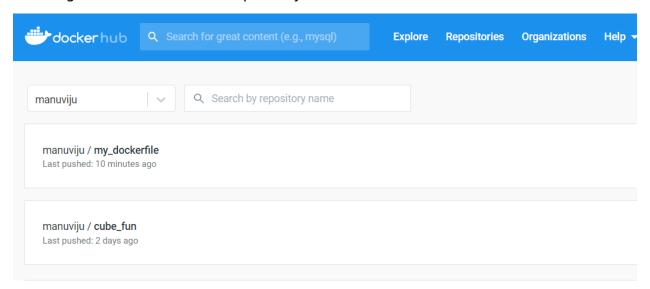
```
Manoj Workbook@DESKTOP-G4ED8RQ_MINGW64 /d/inuron/dockers/Hello_World
$ docker images
REPOSITORY
                      TAG
                               IMAGE ID
                                             CREATED
                                                             SIZE
my dockerfile
                      latest f09350878d28 13 minutes ago
                                                            1.06GB
manuviju/my dockerfile
                      latest f09350878d28 13 minutes ago
                                                            1.06GB
                      latest
                               ba8e53fe81bd 47 hours ago
cube fun
                                                             1.06GB
manuviju/cube fun
                      latest ba8e53fe81bd 47 hours ago
                                                            1.06GB
<none>
                      <none> dfb1a54ae209 2 days ago
                                                            1.06GB
                               f8528f17261c 7 days ago
redis
                      latest
                                                             117MB
hello-world
                      latest feb5d9fea6a5 12 months ago
                                                            13.3kB
```

12. docker push manuviju/my_dockerfile:latest

Pushing the file into docker hub, with a latest tag.

```
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inur
$ docker push manuviju/my dockerfile:latest
The push refers to repository [docker.io/manuv.
15309a45abbd: Pushed
5f70bf18a086: Mounted from manuviju/cube fun
36c84fc99ca2: Pushed
4cfc86a86dc9: Mounted from library/python
634bb2b2ca8e: Mounted from library/python
80bc379fe03f: Mounted from library/python
0c7daf9a72c8: Mounted from manuviju/cube fun
75ba02937496: Mounted from manuviju/cube fun
288cf3a46e32: Mounted from manuviju/cube fun
186da837555d: Mounted from manuviju/cube fun
955c9335e041: Mounted from manuviju/cube_fun
8e079fee2186: Mounted from manuviju/cube fun
latest: digest: sha256:8fa34093295726209db6029
(base)
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inur
$
```

Showing it in the docker hub repository



13. docker logs 9910d4b63ac0

Checking live tail of container log's by providing container ID

```
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers/Hello World

$ docker logs 9910d4b63ac0

* Serving Flask app 'app'

* Debug mode: off

WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI:

* Running on all addresses (0.0.0.0)

* Running on http://127.0.0.1:5000

* Running on http://172.17.0.2:5000

Press CTRL+C to quit (base)
```

14.docker images -a

Showing all images present in the machine

Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers/Hello World \$ docker images -a

p docker illiages -a				
REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
manuviju/my_dockerfile	latest	f09350878d28	41 minutes ago	1.06GB
my_dockerfile	latest	f09350878d28	41 minutes ago	1.06GB
cube_fun	latest	ba8e53fe81bd	47 hours ago	1.06GB
manuviju/cube_fun	latest	ba8e53fe81bd	47 hours ago	1.06GB
<none></none>	<none></none>	dfb1a54ae209	2 days ago	1.06GB
redis	latest	f8528f17261c	7 days ago	117MB
hello-world	latest	feb5d9fea6a5	12 months ago	13.3kB
(base)			_	

15.docker kill 9910d4b63ac0

Stopping a specified container forcefully

```
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers/Hello World $ docker kill 9910d4b63ac0 
9910d4b63ac0 (base)
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers/Hello World $ docker ps 
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES (base)
Manoj Workbook@DESKTOP-G4ED8RQ MINGW64 /d/inuron/dockers/Hello World
```