

/* Getting available version of Node JS */

```
PS C:\Users\HP> node --version  
v18.15.0
```

/* Getting available version of Docker */

```
PS C:\Users\HP> docker --version  
Docker version 20.10.24, build 297e128
```

/* Using folder WADL_Assignment_2B */

```
PS C:\Users\HP> cd WADL_Assignment_2B
```

/* Displaying data from app.js file */

```
PS C:\Users\HP\WADL_Assignment_2B> node app.js  
Hello, I am Srushti Bhoite  
This is my First Application
```

/* Pulling node from the docker repository

```
PS C:\Users\HP\WADL_Assignment_2B> docker pull node  
Using default tag: latest  
latest: Pulling from library/node  
b0248cf3e63c: Pull complete  
127e97b4daf7: Pull complete  
0336c50c9f69: Pull complete  
1b89f3c7f7da: Pull complete  
2d6277217976: Pull complete  
9b293df1e1ca: Pull complete  
e6d1f4eea98c: Pull complete  
c0a4027ccc92: Pull complete  
14648abcbebd: Pull complete  
Status: Downloaded newer image for node:latest  
docker.io/library/node:latest
```

/* Checking the images present in docker file and here "node" is appearing as an image */

```
PS C:\Users\HP\WADL_Assignment_2B> docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
node latest 5bb57e984682 3 days ago 999MB
```

/* Building a docker image with name firstdocker. Here, -t is for tagging the name */

```
PS C:\Users\HP\WADL_Assignment_2B> docker image build -t firstdocker .
```

```
[+] Building 5.9s (7/7) FINISHED
```

```
=> [internal] load build definition from Dockerfile
```

```
0.1s
```

```
=> => transferring dockerfile: 102B
```

```
0.0s
```

```
=> => transferring context: 2B
```

```
0.0s
```

```
=> [internal] load metadata for docker.io/library/node:alpine
```

```
4.9s
```

```
=> [internal] load build context
```

```
0.0s
```

```
=> CACHED [1/2] FROM
```

```
docker.io/library/node:alpine@sha256:53741c7511b1836b5eb7e788a7b399c058b0b549f205d2c6af831ec1a9a81c 0.0s
```

```
=> [2/2] COPY . /app
```

```
0.1s
```

```
=> exporting to image
```

```
0.2s
```

```
=> => exporting layers
```

```
0.1s
```

```
=> => writing image
```

```
sha256:4a58944710ae907c0312a397ef94bac0bc70cca00936ae1cfe49cbbbd1e5b147 0.0s
```

```
=> => naming to docker.io/library/firstdocker
```

/* Building a docker image with name "docker/getting-started". Here, -t is for tagging the name */

```
PS C:\Users\HP\WADL_Assignment_2B> docker image build -t docker/getting-started .
```

```
[+] Building 10.5s (8/8) FINISHED
```

```
=> [internal] load build definition from Dockerfile
```

```
0.0s
```

```
=> => transferring dockerfile: 103B
```

```
0.0s
```

```
=> [internal] load .dockerignore
```

```
0.0s
```

```
=> [internal] load metadata for docker.io/library/node:alpine
```

```
10.4s
```

```
=> [auth] library/node:pull token for registry-1.docker.io
```

```
0.0s
```

```
=> [internal] load build context
```

```
0.0s
```

```
=> => transferring context: 128B
```

```
0.0s
```

```

=> [1/2] FROM
docker.io/library/node:alpine@sha256:53741c7511b1836b5eb7e788a7b399c058b0b549f205d2c6af831
ec1a9a81c31      0.0s
=> CACHED [2/2] COPY . /app
0.0s
=> exporting to image
0.0s
=> => exporting layers
0.0s
=> => writing image
sha256:5fcb1c290b8f87248a25702140c3e0b20c1c905fe156992ecfa7d37a76a9eef5 0.0s
=> => naming to docker.io/docker/getting-started

```

/* Checking the images present in docker file and here "firstdocker" and "docker/getting-started" is appearing as an image */

```

PS C:\Users\HP\WADL_Assignment_2B> docker images

```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
firstdocker	latest	4a58944710ae	2 hours ago	176MB
node	latest	5bb57e984682	3 days ago	999MB
docker/getting-started	latest	3e4394f6b72f	3 months ago	47MB

/* Here we check the login credentials. we first need to login through the docker desktop to the web. We need to login to the hub.

```

PS C:\Users\HP\WADL_Assignment_2B> docker login
Authenticating with existing credentials...
Login Succeeded

```

Logging in with your password grants your terminal complete access to your account.

/* Push an image or a repository to a registry */

```

PS C:\Users\HP\WADL_Assignment_2B> docker tag firstdocker wadl_assignment_2bPS
C:\Users\HP\WADL_Assignment_2B> docker push wadl_assignment_2b
Using default tag: latest
The push refers to repository [docker.io/ wadl_assignment_2b]
63b8a2840ebe: Pushed
965d9c709b97: Pushed
36ba3d19b3d2: Pushed
601c47069c33: Pushed
f1417ff83b31: Pushed
latest: digest: sha256:5bf54922ba86c548eb2716fa21fb09f1dc7ae227e8a86c3c90746691400acd24 size:
1365

```

/* Pull an image or repository from a registry */

```
PS C:\Users\HP\WADL_Assignment_2B> docker pull wadl_assignment_2bUsing default
tag: latest
latest: Pulling from wadl_assignment_2b
Digest: sha256:5bf54922ba86c548eb2716fa21fb09f1dc7ae227e8a86c3c90746691400acd24
Status: Image is up to date for wadl_assignment_2b:latest docker.io/
wadl_assignment_2b:latest
```

/* Running the image " wadl_assignment_2b" as a container */

```
PS C:\Users\HP\WADL_Assignment_2B> docker run -d -p 80:80 wadl_assignment_2b
558021cddebd03aef8a350b56fc2e97c1eb4dbf5eeae0e611c7b2648f53a5836
```

/* Running the image "docker/getting-started" as a container */

```
PS C:\Users\HP\WADL_Assignment_2B> docker run -d -p 80:80 docker/getting-started
3a231244102f6d2e4c95495329873ea0f5c5963826c479a961baa091f316c7f1
```

2023-04-16 03:05:12 /docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration

2023-04-16 03:05:12 /docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/

2023-04-16 03:05:12 /docker-entrypoint.sh: Launching

/docker-entrypoint.d/10-listen-on-ipv6-by-default.sh

2023-04-16 03:05:12 10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf

2023-04-16 03:05:12 10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf

2023-04-16 03:05:12 /docker-entrypoint.sh: Launching

/docker-entrypoint.d/20-envsubst-on-templates.sh

2023-04-16 03:05:12 /docker-entrypoint.sh: Launching

/docker-entrypoint.d/30-tune-worker-processes.sh

2023-04-16 03:05:12 /docker-entrypoint.sh: Configuration complete; ready for start up

2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: using the "epoll" event method

2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: nginx/1.23.3

2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: built by gcc 12.2.1 20220924 (Alpine 12.2.1_git20220924-r4)

2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: OS: Linux

5.10.16.3-microsoft-standard-WSL2

2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576

2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: start worker processes

2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: start worker process 30

```
2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: start worker process 31
2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: start worker process 32
2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: start worker process 33
2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: start worker process 34
2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: start worker process 35
2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: start worker process 36
2023-04-16 03:05:12 2023/04/15 21:35:12 [notice] 1#1: start worker process 37
```

/* Using Docker --help Command */

```
PS C:\Users\HP\WADL_Assignment_2B> docker --help
```

Usage: docker [OPTIONS] COMMAND

A self-sufficient runtime for containers

Options:

- config string Location of client config files (default "C:\\Users\\HP\\.docker")
- c, --context string Name of the context to use to connect to the daemon (overrides DOCKER_HOST env var and default context set with "docker context use")
- D, --debug Enable debug mode
- H, --host list Daemon socket(s) to connect to
- l, --log-level string Set the logging level ("debug"|"info"|"warn"|"error"|"fatal") (default "info")
- tls Use TLS; implied by --tlsverify
- tlscacert string Trust certs signed only by this CA (default "C:\\Users\\HP\\.docker\\ca.pem")
- tlscert string Path to TLS certificate file (default "C:\\Users\\HP\\.docker\\cert.pem")
- tlskey string Path to TLS key file (default "C:\\Users\\HP\\.docker\\key.pem")
- tlsverify Use TLS and verify the remote
- v, --version Print version information and quit

Management Commands:

- builder Manage builds
- buildx* Docker Buildx (Docker Inc., v0.10.4)
- compose* Docker Compose (Docker Inc., v2.17.2)
- config Manage Docker configs
- container Manage containers
- context Manage contexts
- dev* Docker Dev Environments (Docker Inc., v0.1.0)
- extension* Manages Docker extensions (Docker Inc., v0.2.19)

image	Manage images
init*	Creates Docker-related starter files for your project (Docker Inc., v0.1.0-beta.2)
manifest	Manage Docker image manifests and manifest lists
network	Manage networks
node	Manage Swarm nodes
plugin	Manage plugins
sbom*	View the packaged-based Software Bill Of Materials (SBOM) for an image (Anchore Inc., 0.6.0)
scan*	Docker Scan (Docker Inc., v0.25.0)
scout*	Command line tool for Docker Scout (Docker Inc., v0.9.0)
secret	Manage Docker secrets
service	Manage services
stack	Manage Docker stacks
swarm	Manage Swarm
system	Manage Docker
trust	Manage trust on Docker images
volume	Manage volumes

Commands:

attach	Attach local standard input, output, and error streams to a running container
build	Build an image from a Dockerfile
commit	Create a new image from a container's changes
cp	Copy files/folders between a container and the local filesystem
create	Create a new container
diff	Inspect changes to files or directories on a container's filesystem
events	Get real time events from the server
images	List images
import	Import the contents from a tarball to create a filesystem image
login	Log in to a Docker registry
logout	Log out from a Docker registry
logs	Fetch the logs of a container
ps	List containers
pull	Pull an image or a repository from a registry
push	Push an image or a repository to a registry
rename	Rename a container
run	Run a command in a new container
save	Save one or more images to a tar archive (streamed to STDOUT by default)
start	Start one or more stopped containers
stop	Stop one or more running containers
tag	Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE
top	Display the running processes of a container

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