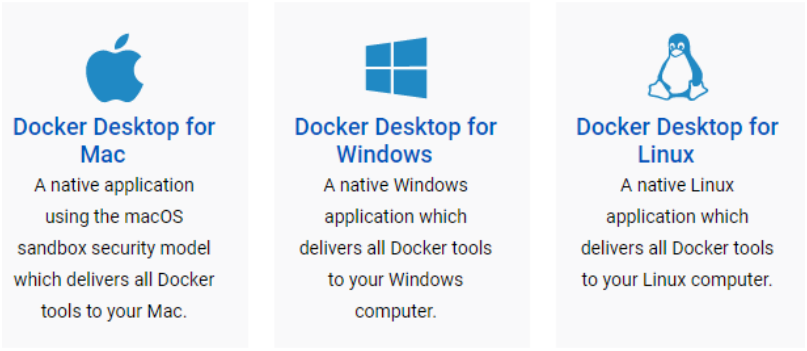
Step 1 : Install Docker https://docs.docker.com/get-docker/



Step 2 : Install Docker Desktop on Windows

a) Read the System Requirements before installing Docker.

System requirements

Your Windows machine must meet the following requirements to successfully install Docker Desktop.

WSL 2 backend | Hyper-V backend and Windows containers

WSL 2 backend

- Windows 11 64-bit: Home or Pro version 21H2 or higher, or Enterprise or Education version 21H2 or higher.
- Windows 10 64-bit: Home or Pro 21H1 (build 19043) or higher, or Enterprise or Education 20H2 (build 19042) or higher.
- Enable the WSL 2 feature on Windows. For detailed instructions, refer to the Microsoft documentation.
- The following hardware prerequisites are required to successfully run WSL 2 on Windows 10 or Windows 11:
    - 64-bit processor with Second Level Address Translation (SLAT)
    - 4GB system RAM
    - BIOS-level hardware virtualization support must be enabled in the BIOS settings. For more information, see Virtualization.

b) Download Docker

Install Docker Desktop on Windows

Welcome to Docker Desktop for Windows. This page contains information about Docker Desktop for Windows system requirements, download URL, instructions to install and update Docker Desktop for Windows.

Docker Desktop for Windows

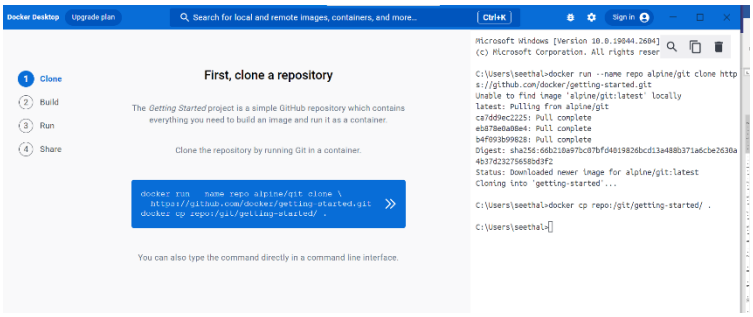
For checksums, see Release notes

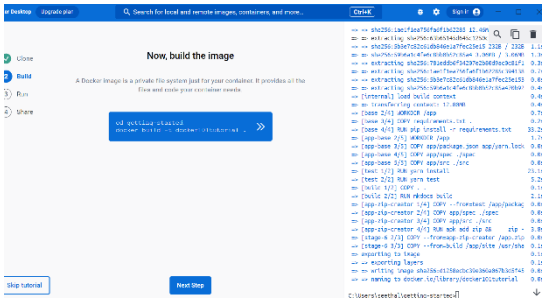
c) Install Docker

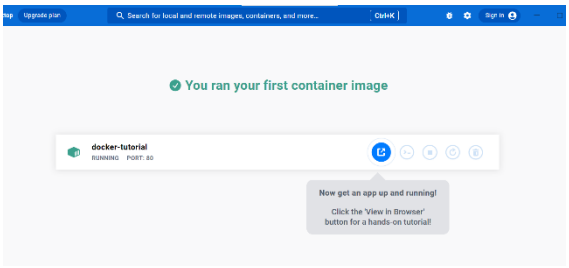
Docker Manual: https://docs.docker.com/desktop/

Exercise:

1. Run Docker Desktop & follow the first tutorial.







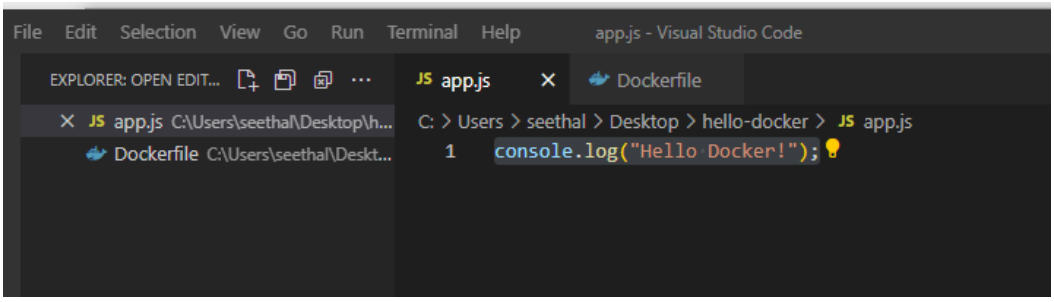
2. [Docker Tutorial for Beginners]

//Using command lines docker

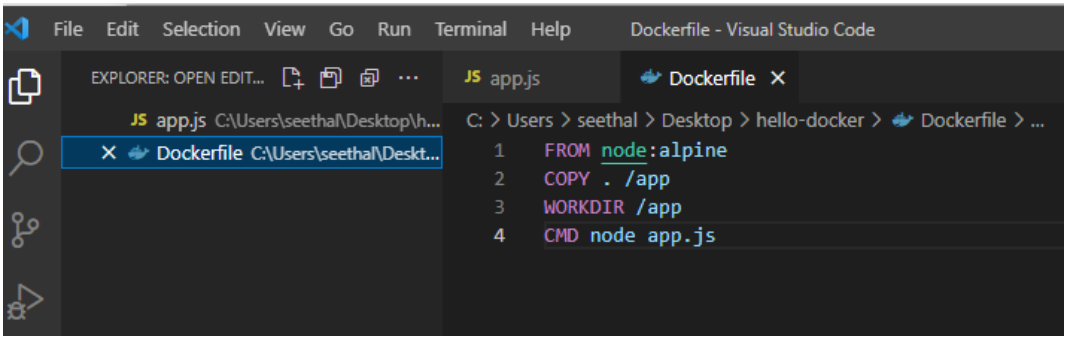
1. Create directory in Desktop
   mkdir hello-docker

2. Move to hello-docker
   cd hello-docker

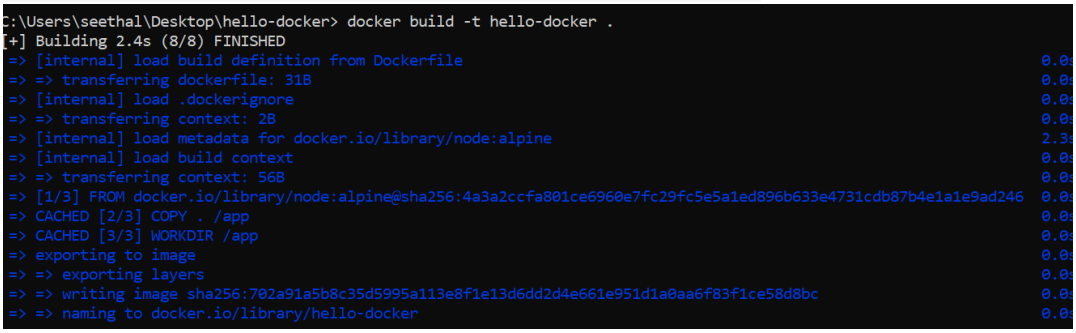
3. Create app.js



4. Create Dockerfile



5. Build the image file
   Command Line:
   docker image build [OPTIONS] PATH | URL | -



6. To view image files

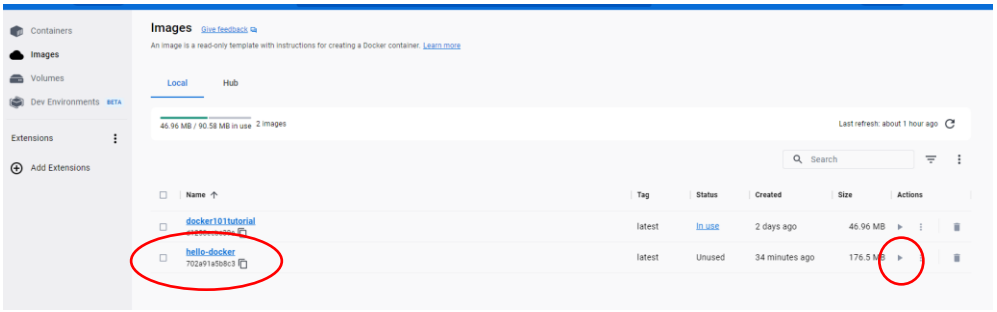
```
C:\Users\seethal\Desktop\hello-docker>docker image ls
REPOSITORY          TAG       IMAGE ID       CREATED              SIZE
hello-docker        latest    702a91a5b8c3   About a minute ago   177MB
docker101tutorial   latest    d1258ecbc39e   2 days ago           47MB
```

7. To containinerise, run the image file

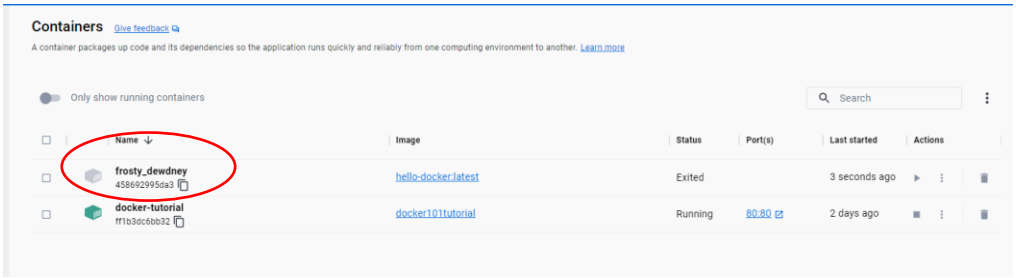
```
Command Line:
docker container run --name [container_name] [docker_image]
//if option of container name is not provided, default name
//will be given
```

```
C:\Users\seethal\Desktop\hello-docker>docker run hello-docker
Hello Docker!
```

8. In the Docker Desktop - image



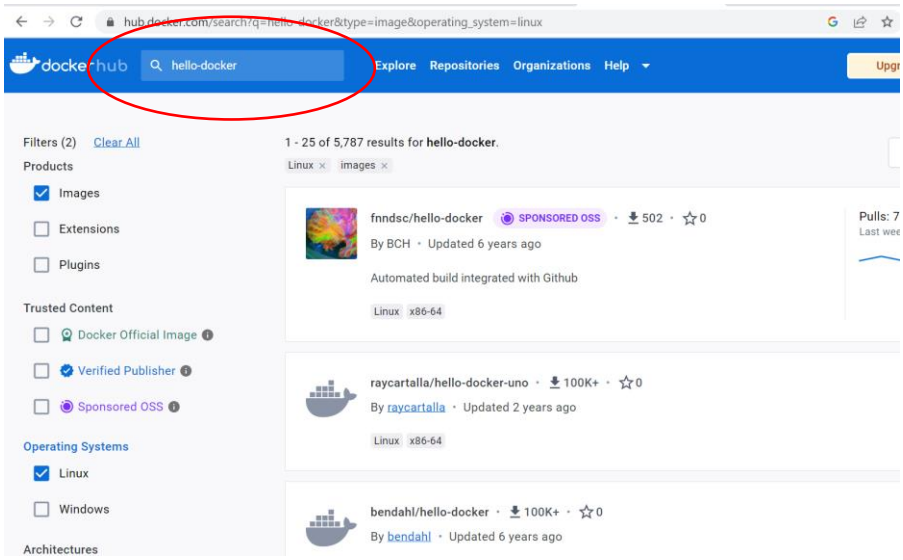
9. In the Docker Desktop – container (the isolated environment)



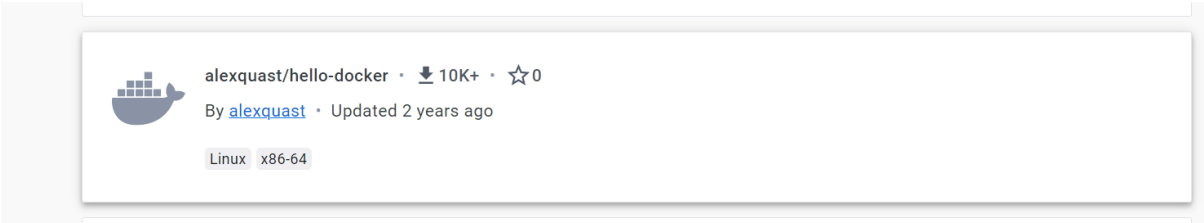
10. Docker hub – Collaborate via push/pull

Step 1 : https://hub.docker.com/

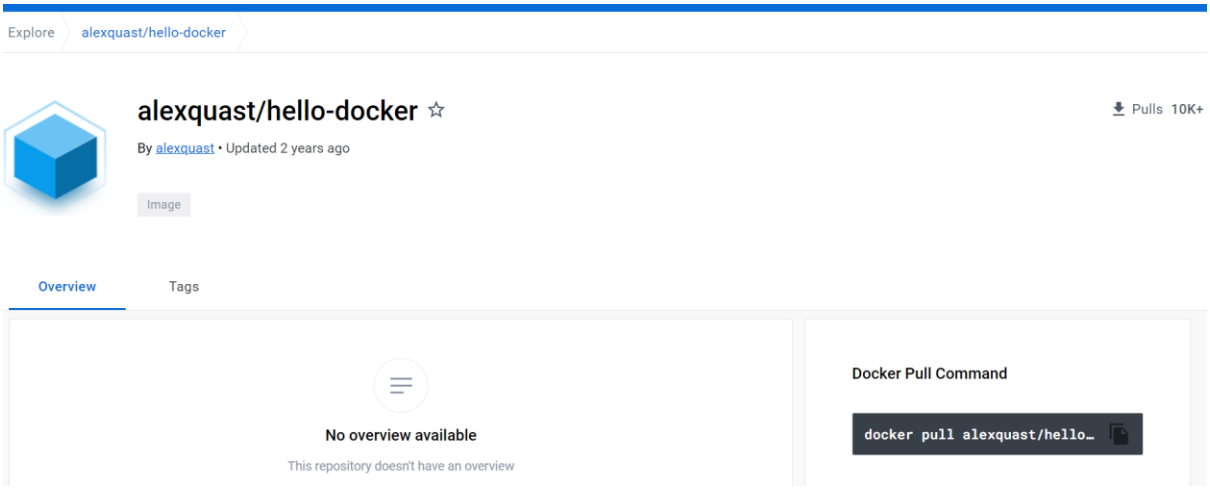
Step 2: Search for image file



Step 3:Click on the image which you need to pull



Step 4: Copy and paste to your command prompt



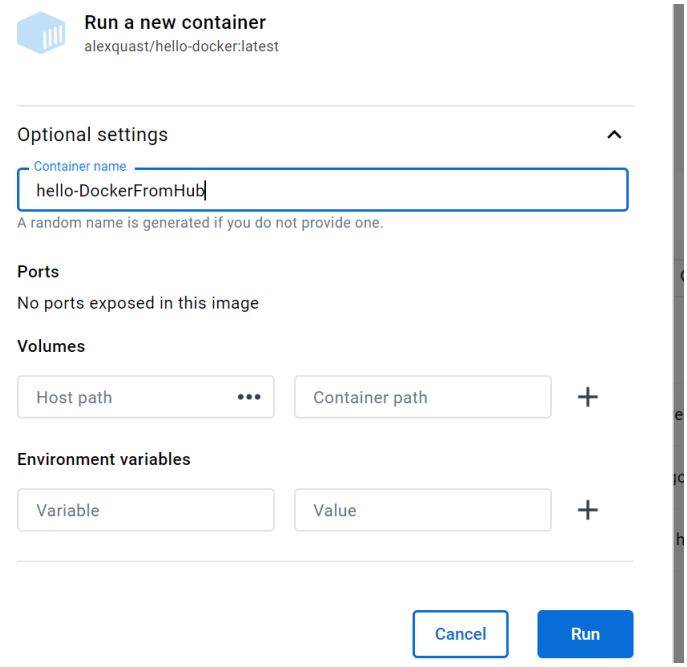
Step 4: docker pull alexquast/hello-docker

```
C:\Users\seethal>docker pull alexquast/hello-docker
Using default tag: latest
latest: Pulling from alexquast/hello-docker
9a6724ff3fcd: Pull complete
3b3c21ce1f8c: Pull complete
560ed84bbbcc: Pull complete
281a19a6c438: Pull complete
33be522e5500: Pull complete
1dd14de5680c: Pull complete
0738682cd647: Pull complete
Digest: sha256:30e3ec5a18ab913b58057ecf062854abb49108ca134d06769a6a43493ac03b4c
Status: Downloaded newer image for alexquast/hello-docker:latest
docker.io/alexquast/hello-docker:latest
```

```
C:\Users\seethal>docker image ls
REPOSITORY                TAG       IMAGE ID       CREATED         SIZE
hello-docker              latest    702a91a5b8c3   22 hours ago    177MB
docker101tutorial         latest    d1258ecbc39e   3 days ago      47MB
alexquast/hello-docker    latest    433da19f7fd4   2 years ago     122MB
```

//Use the Docker desktop to run the image, use the optional to rename the container

//Use the terminal to input Linux commands



//Click on the image to view the files