

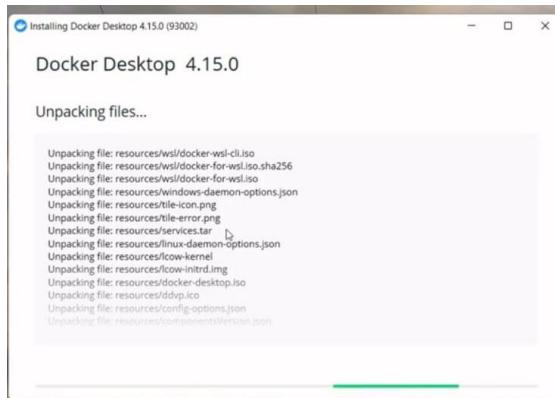
Practical No. 8

Aim: Installing and Configuring Dockers in localhost and running multiple images on a Docker Platform.

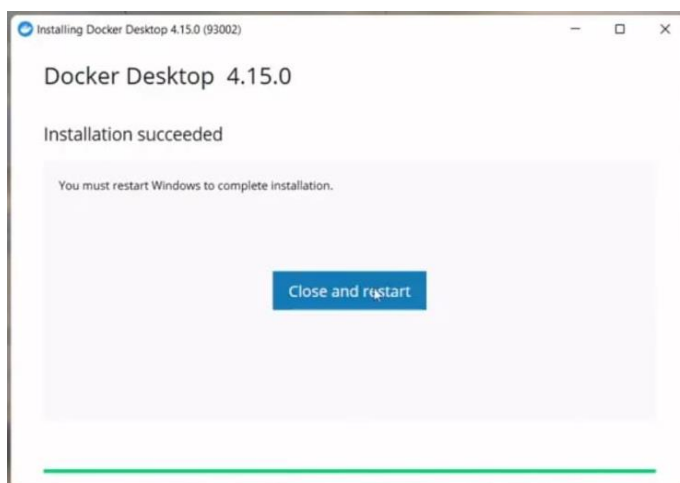
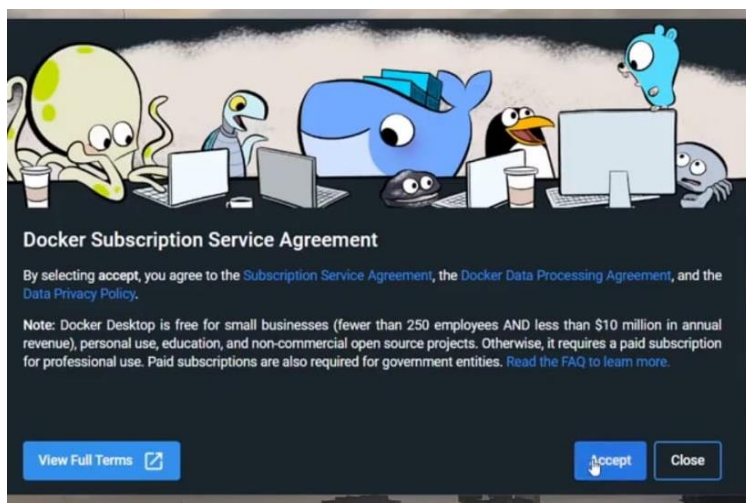
Implementation:

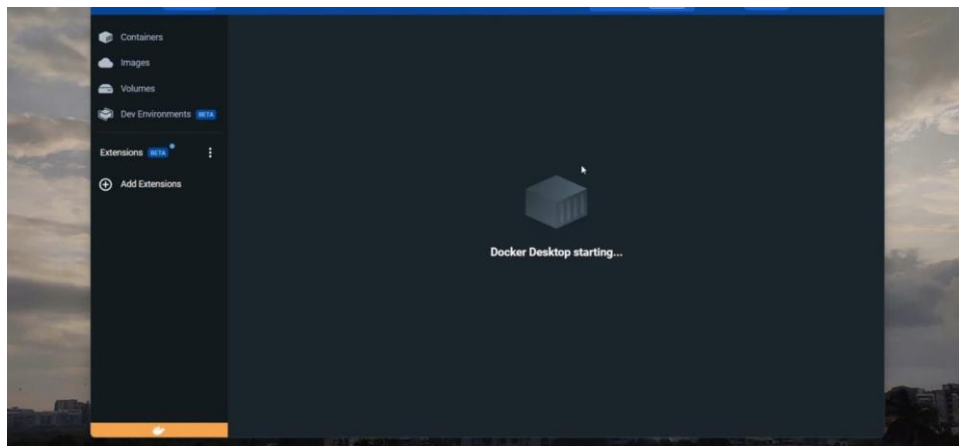
1. Installing Docker Desktop <https://www.docker.com/products/docker-desktop/>

Click on Get Started and download Docker Desktop for Windows

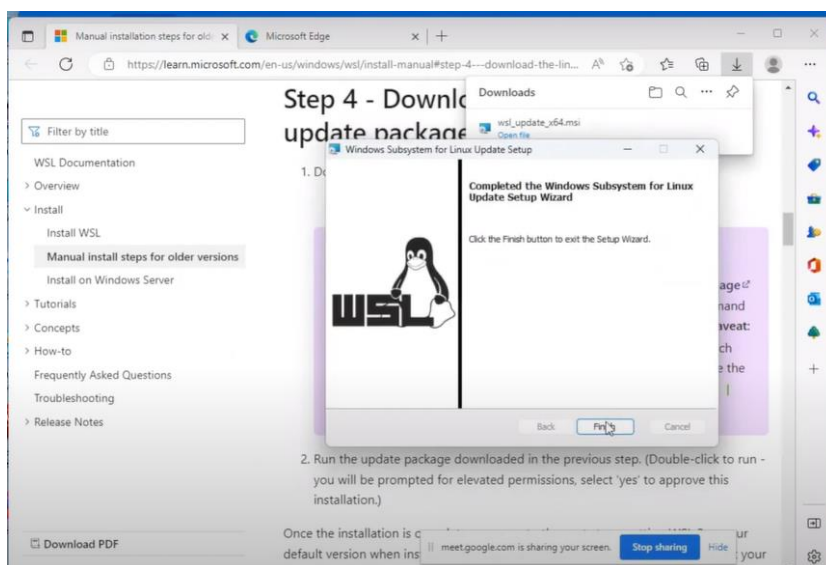
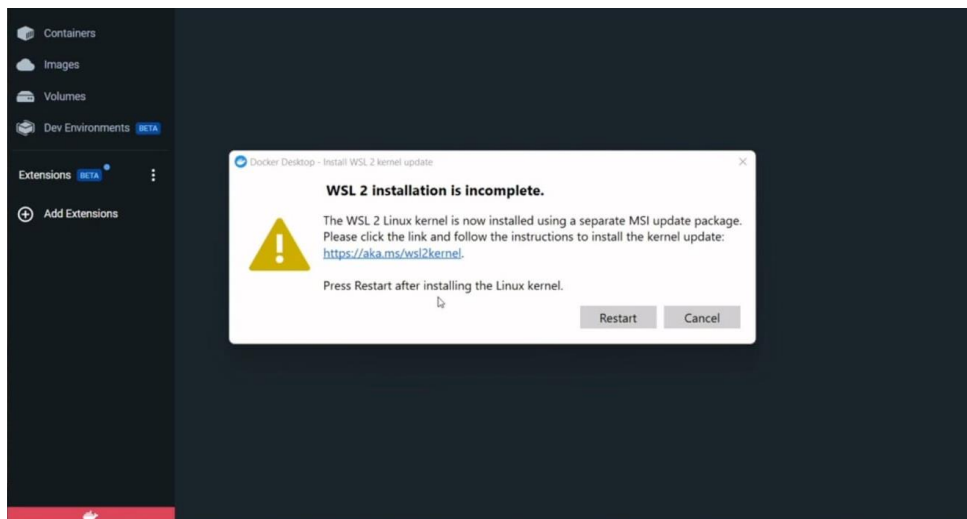


Click on Accept and complete the installation of Docker Desktop



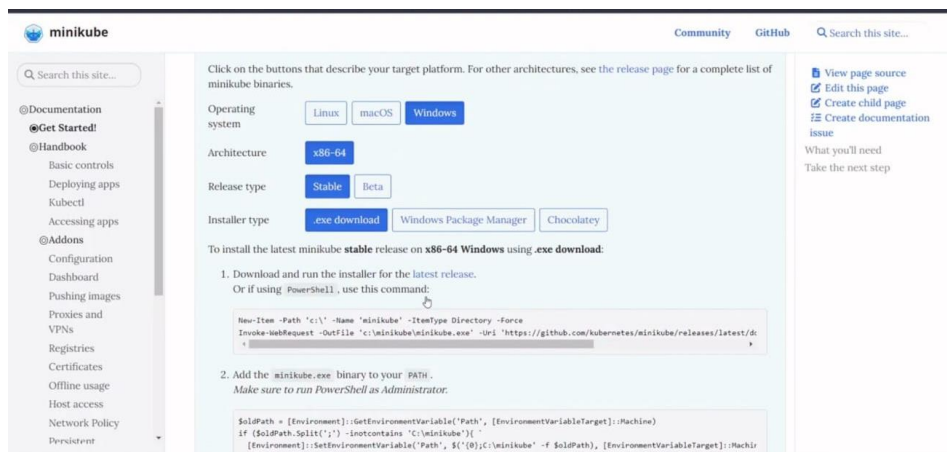


2. **Download and Install the updated version of WSL2** Click on the link and download and install the updated version



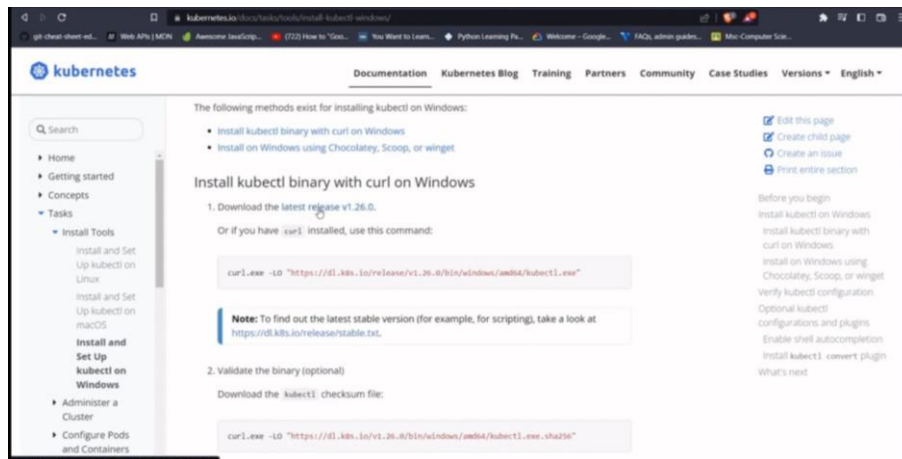
3. **Install minikube** <https://minikube.sigs.k8s.io/docs/start/>

Click on the .exe download to download minikube and Install minikube

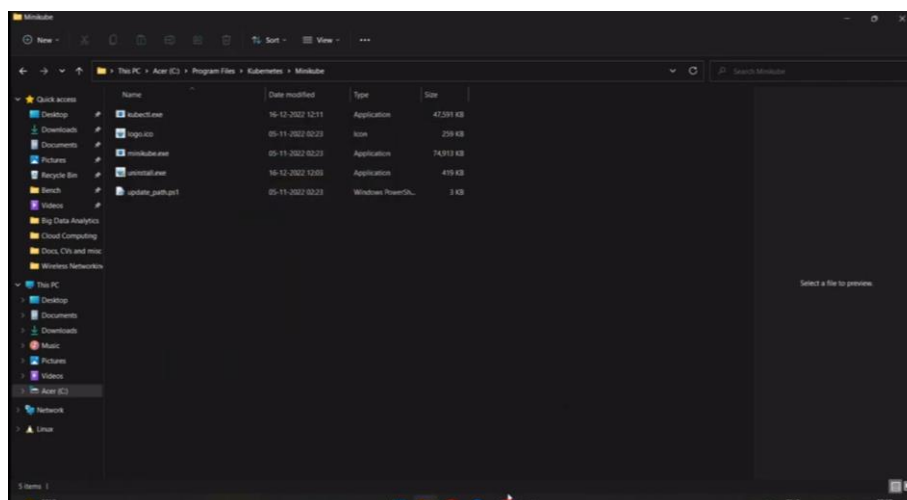


4. Install kubectl for windows <https://kubernetes.io/docs/tasks/tools/install-kubectl-windows/>

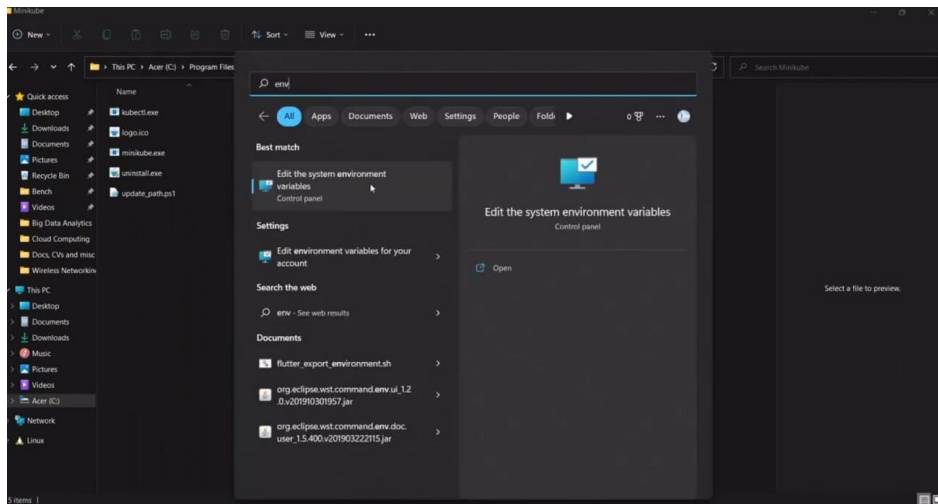
Click on the latest release and download the kubectl



Copy the kubectl where minikube is saved and then copy the path

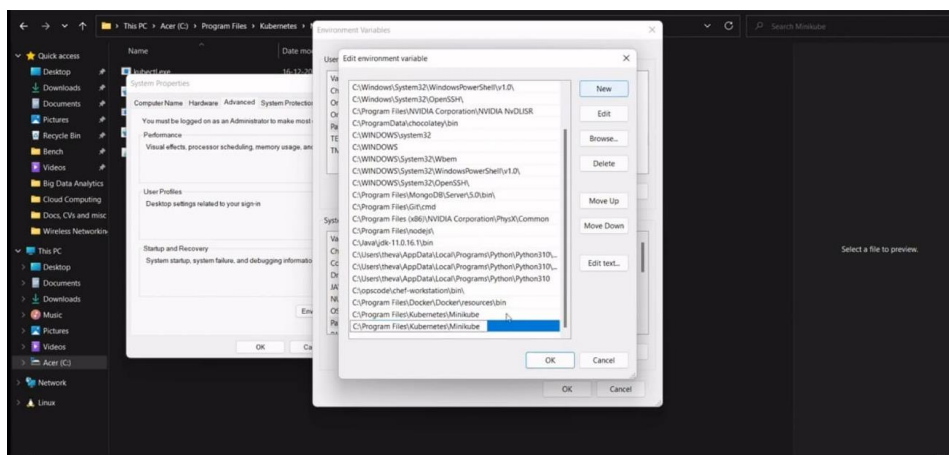
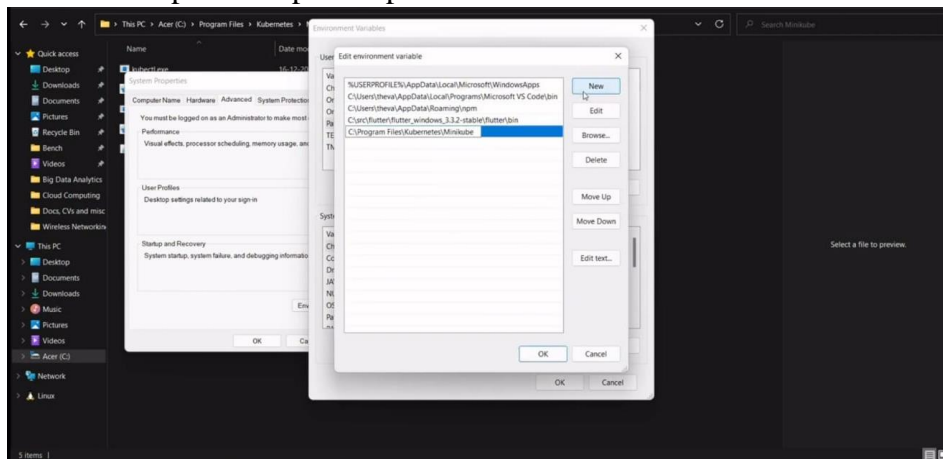


Go to environment variable:



Set the path in environment variable for the user as well as the system

Click new > paste the path copied before



Check whether Kubectl is installed

```
Windows PowerShell
auth          Inspect authorization
debug         Create debugging sessions for troubleshooting workloads and nodes

Advanced Commands:
diff          Diff the live version against a would-be applied version
apply         Apply a configuration to a resource by file name or stdin
patch         Update fields of a resource
replace       Replace a resource by file name or stdin
wait          Experimental: Wait for a specific condition on one or many resources
kustomize     Build a kustomization target from a directory or URL.

Settings Commands:
label         Update the labels on a resource
annotate      Update the annotations on a resource
completion    Output shell completion code for the specified shell (bash, zsh, fish, or powershell)

Other Commands:
alpha         Commands for features in alpha
api-resources Print the supported API resources on the server
api-versions  Print the supported API versions on the server, in the form of "group/version"
config        Modify kubeconfig files
plugin        Provides utilities for interacting with plugins
version       Print the client and server version information
```

Open Docker and copy the line below and paste in the command prompt



```
Windows PowerShell
options       Show a list of global command-line options (applies to all commands).
license       Outputs the licenses of dependencies to a directory

Other Commands:
completion    Generate command completion for a shell

Use "minikube <command> --help" for more information about a given command.
PS C:\Users\theva> docker run -d -p 80:80 docker/getting-started
Unable to find image 'docker/getting-started:latest' locally
latest: Pulling from docker/getting-started
c158987b0551: Pull complete
1e35f6679fab: Pull complete
cb9626c74200: Pull complete
b6334b6ace34: Pull complete
fd1c9928c82: Pull complete
9b6f639ec6ea: Pull complete
ee68d3549ec8: Pull complete
def9780e4fd4: Pull complete
277d3d14911d: Pull complete
Digest: sha256:aa5800b9692670146332b3218f73789513ddf9e4273306b491250cb86fca9499
Status: Downloaded newer image for docker/getting-started:latest
f2516de348a1a637736a114a185581eeaff40b03666a9d17ed3cde5a623e8873
```

Pull the images in minikube

```
PS C:\Users\theva> minikube start --vm-driver=docker
minikube v1.28.0 on Microsoft Windows 11 Home Single Language 10.0.22000 Build 22000
* Using the docker driver based on user configuration
* Using Docker Desktop driver with root privileges
* Starting control plane node minikube in cluster minikube
* Pulling base image ...
* Downloading Kubernetes v1.25.3 preload ...
> preloaded-images-k8s-v18-v1...: 798.84 MiB / 385.44 MiB [ ] 0.20% ? p/s ?
```

Check for the container status below

