

## Experiment no 5

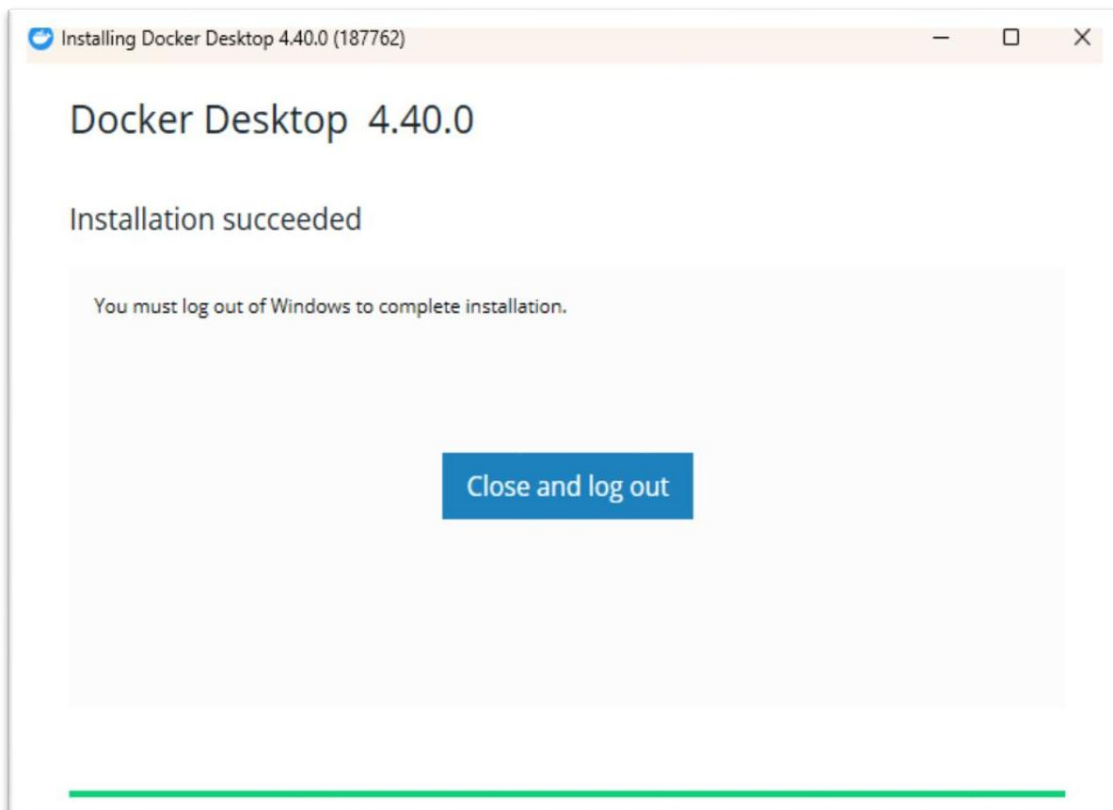
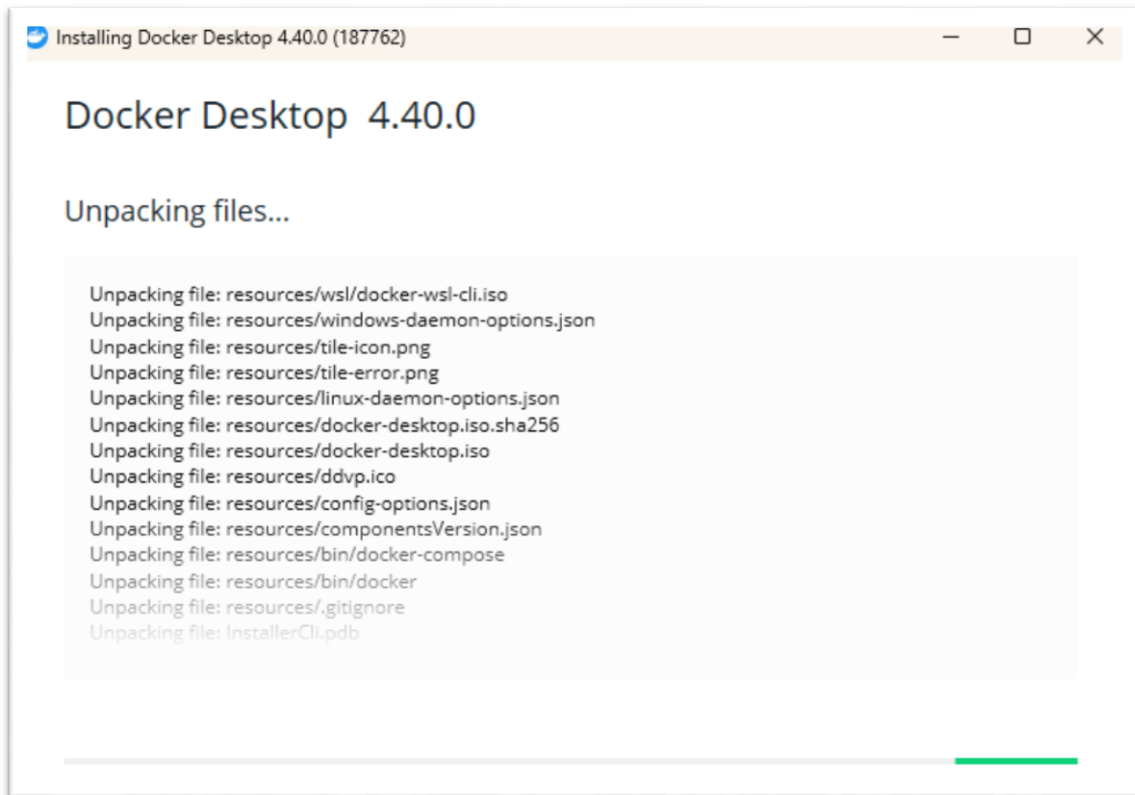
Name- KARTIK BHUWAD

Roll no-83

Div- A

Batch-A4

Containerization by running and building a **Docker** Container :-





## Finish setting up Docker Desktop

version 4.40.0 (187762)

Complete the installation of Docker Desktop.

- ☒ Use recommended settings (requires administrator password)  
Docker Desktop automatically sets the necessary configurations that work for most developers.
- ☐ Use advanced settings  
You manually set your preferred configurations.

Finish

docker:desktop PERSONAL

### Welcome to Docker

[Skip](#)

**Work** Personal

Using Docker for work?  
We recommend signing in with your work email address.

Work email address

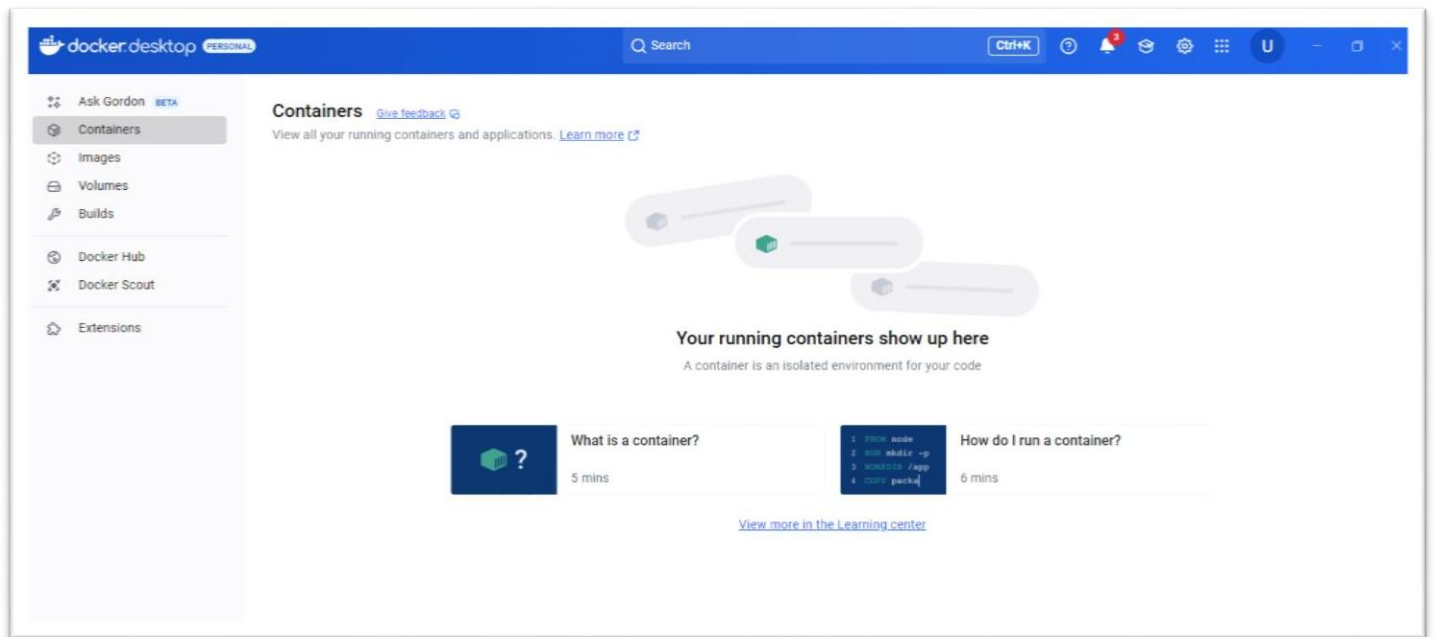
Continue

Or



Create an account





```
Command Prompt - wsl --install
Microsoft Windows [Version 10.0.22631.5039]
(c) Microsoft Corporation. All rights reserved.

C:\Users\user>wsl --install
Downloading: Ubuntu
[ 0.4% ]
```

```
Command Prompt
Microsoft Windows [Version 10.0.22631.5039]
(c) Microsoft Corporation. All rights reserved.

C:\Users\user>wsl --install
Downloading: Ubuntu
Installing: Ubuntu
Distribution successfully installed. It can be launched via 'wsl.exe -d Ubuntu'

C:\Users\user>
```

```
Microsoft Windows [Version 10.0.22621.4317]
(c) Microsoft Corporation. All rights reserved.

C:\Users\HP>docker -v
Docker version 28.0.4, build b8034c0

C:\Users\HP>docker run --detach --publish 80:80 --name webserver nginx
Unable to find image 'nginx:latest' locally
latest: Pulling from library/nginx
254e724d7786: Pull complete
913115292750: Pull complete
3e544d53ce49: Pull complete
4f21ed9ac0c0: Pull complete
d38f2ef2d6f2: Pull complete
40a6e9f4e456: Pull complete
d3dc5ec71e9d: Pull complete
Digest: sha256:c15da6c91de8d2f436196f3a768483ad32c258ed4e1beb3d367a27ed67253e66
Status: Downloaded newer image for nginx:latest
a6118f34abledb49c6cb4aeddd674da333376c73e0e338cbf719ab8dd1048002

C:\Users\HP>docker image ls
REPOSITORY TAG IMAGE ID CREATED SIZE
nginx latest a830707172e8 3 weeks ago 192MB

C:\Users\HP>docker container ls
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
a6118f34able nginx "/docker-entrypoint..." 7 minutes ago Up 7 minutes 0.0.0.0:80->80/tcp webserver

C:\Users\HP>docker info
Client:
Version: 28.0.4
Context: desktop-linux
Debug Mode: false
```

```
Client:
Version:      28.0.4
Context:      desktop-linux
Debug Mode:   false
Plugins:
ai: Docker AI Agent - Ask Gordon (Docker Inc.)
  Version:    v1.1.3
  Path:       C:\Program Files\Docker\cli-plugins\docker-ai.exe
buildx: Docker Buildx (Docker Inc.)
  Version:    v0.22.0-desktop.1
  Path:       C:\Program Files\Docker\cli-plugins\docker-buildx.exe
cloud: Docker Cloud (Docker Inc.)
  Version:    0.2.20
  Path:       C:\Program Files\Docker\cli-plugins\docker-cloud.exe
compose: Docker Compose (Docker Inc.)
  Version:    v2.34.0-desktop.1
  Path:       C:\Program Files\Docker\cli-plugins\docker-compose.exe
debug: Get a shell into any image or container (Docker Inc.)
  Version:    0.0.38
  Path:       C:\Program Files\Docker\cli-plugins\docker-debug.exe
desktop: Docker Desktop commands (Beta) (Docker Inc.)
  Version:    v0.1.6
  Path:       C:\Program Files\Docker\cli-plugins\docker-desktop.exe
dev: Docker Dev Environments (Docker Inc.)
  Version:    v0.1.2
  Path:       C:\Program Files\Docker\cli-plugins\docker-dev.exe
extension: Manages Docker extensions (Docker Inc.)
  Version:    v0.2.27
  Path:       C:\Program Files\Docker\cli-plugins\docker-extension.exe
init: Creates Docker-related starter files for your project (Docker Inc.)
  Version:    v1.4.0
  Path:       C:\Program Files\Docker\cli-plugins\docker-init.exe
sbom: View the packaged-based Software Bill Of Materials (SBOM) for an image (Anchore Inc.)
```

```
127.0.0.0/8
Live Restore Enabled: false

WARNING: No blkio throttle.read_bps_device support
WARNING: No blkio throttle.write_bps_device support
WARNING: No blkio throttle.read_iops_device support
WARNING: No blkio throttle.write_iops_device support
WARNING: DOCKER_INSECURE_NO_IPTABLES_RAW is set
WARNING: daemon is not using the default seccomp profile

C:\Users\HP>docker inspect

C:\Users\HP>docker inspect a6118f34ab1edb49c6cb4aedd674da333376c73e0e338cbf719ab8dd1048002
[
  {
    "Id": "a6118f34ab1edb49c6cb4aedd674da333376c73e0e338cbf719ab8dd1048002",
    "Created": "2025-05-09T04:17:25.014218825Z",
    "Path": "/docker-entrypoint.sh",
    "Args": [
      "nginx",
      "-g",
      "daemon off;"
    ],
    "State": {
      "Status": "running",
      "Running": true,
      "Paused": false,
      "Restarting": false,
      "OOMKilled": false,
      "Dead": false,
      "Pid": 506,
      "ExitCode": 0,
      "Error": ""
    }
  }
]
```

```
Command Prompt

"ExitCode": 0,
"Error": "",
"StartedAt": "2025-05-09T04:17:26.772916309Z",
"FinishedAt": "0001-01-01T00:00:00Z"
},
"Image": "sha256:a830707172e8069c09cf6c67a04e23e5a1a332d70a90a54999b76273a928b9ce",
"ResolvConfPath": "/var/lib/docker/containers/a6118f34ab1edb49c6cb4aedd674da333376c73e0e338cbf719ab8dd1048002/resolv.conf",
"HostnamePath": "/var/lib/docker/containers/a6118f34ab1edb49c6cb4aedd674da333376c73e0e338cbf719ab8dd1048002/hostname",
"HostsPath": "/var/lib/docker/containers/a6118f34ab1edb49c6cb4aedd674da333376c73e0e338cbf719ab8dd1048002/hosts",
"LogPath": "/var/lib/docker/containers/a6118f34ab1edb49c6cb4aedd674da333376c73e0e338cbf719ab8dd1048002/a6118f34ab1edb49c6cb4aedd674da333376c73e0e338cbf719ab8dd1048002-json.log",
"Name": "/webserver",
"RestartCount": 0,
"Driver": "overlay2",
"Platform": "linux",
"MountLabel": "",
"ProcessLabel": "",
"AppArmorProfile": "",
"ExecIDs": null,
"HostConfig": {
  "Binds": null,
  "ContainerIDFile": "",
  "LogConfig": {
    "Type": "json-file",
    "Config": {}
  },
  "NetworkMode": "bridge",
  "PortBindings": {
    "80/tcp": [
      {
        "HostIp": "",
        "HostPort": "80"
      }
    ]
  }
}
```

```
Command Prompt

"Runtime": "runc",
"Isolation": "",
"CpuShares": 0,
"Memory": 0,
"NanoCpus": 0,
"CgroupParent": "",
"BlkioWeight": 0,
"BlkioWeightDevice": [],
"BlkioDeviceReadBps": [],
"BlkioDeviceWriteBps": [],
"BlkioDeviceReadIOps": [],
"BlkioDeviceWriteIOps": [],
"CpuPeriod": 0,
"CpuQuota": 0,
"CpuRealtimePeriod": 0,
"CpuRealtimeRuntime": 0,
"CpusetCpus": "",
"CpusetMems": "",
"Devices": [],
"DeviceCgroupRules": null,
"DeviceRequests": null,
"MemoryReservation": 0,
"MemorySwap": 0,
"MemorySwappiness": null,
"OomKillDisable": false,
"PidsLimit": null,
"Ulimits": [],
"CpuCount": 0,
"CpuPercent": 0,
"IOMaximumIOps": 0,
"IOMaximumBandwidth": 0,
"MaskedPaths": [
  "/proc/asound",

```

