Experiment No: 5

Name : Abhijeet Gangaram Govekar

Roll No : 05

Batch : A1

1. Docker version & Docker run

```
C:\Users\DYP-ATU>docker -v
Docker version 28.0.4, build b8034c0

C:\Users\DYP-ATU>docker run --detach --publish 80:80 --name webserver nginx
Unable to find image 'nginx:latest' locally
latest: Pulling from library/nginx
254e724d7786: Pull complete
d3dc5ec71e9d: Pull complete
913115292750: Pull complete
4f21ed9ac0c0: Pull complete
d38f2ef2d6f2: Pull complete
40a6e9f4e456: Pull complete
3e544d53ce49: Pull complete
Digest: sha256:c15da6c91de8d2f436196f3a768483ad32c258ed4e1beb3d367a27ed67253e66
Status: Downloaded newer image for nginx:latest
ea1118cf8636ef5b98ff39a29837d3ca2aeb398d3ad9b99b228e53f80600a234
```

2. Docker imgae

```
C:\Users\DYP-ATU>docker image ls
REPOSITORY   TAG       IMAGE ID       CREATED       SIZE
nginx        latest    c15da6c91de8   3 weeks ago   279MB
```

3. Docker container

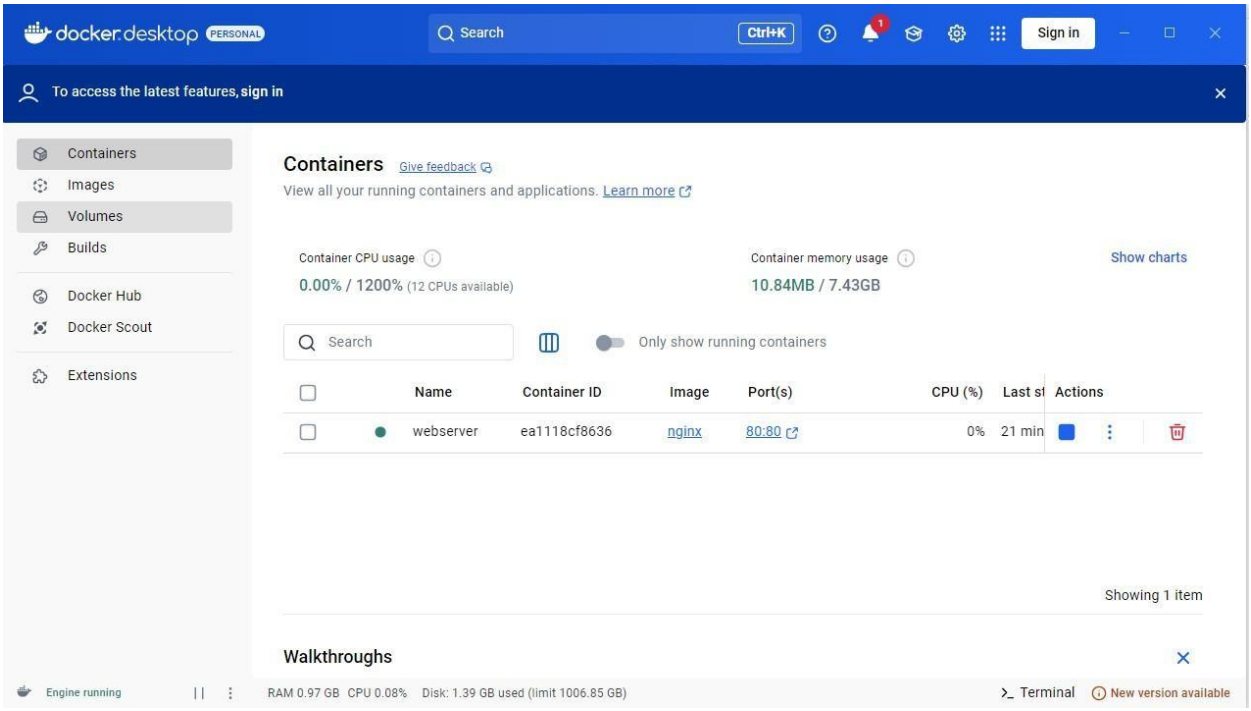
```
C:\Users\DYP-ATU>docker container ls
CONTAINER ID   IMAGE     COMMAND                  CREATED         STATUS         PORTS                NAMES
ea1118cf8636   nginx     "/docker-entrypoint.…"   6 minutes ago   Up 6 minutes   0.0.0.0:80->80/tcp   webserver
```

4. Docker info

```
C:\Users\DYP-ATU>docker info
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.)
    Version:  0.6.0
    Path:     C:\Program Files\Docker\cli-plugins\docker-sbom.exe
  scout: Docker Scout (Docker Inc.)
    Version:  v1.17.0
    Path:     C:\Program Files\Docker\cli-plugins\docker-scout.exe

Server:
 Containers: 1
  Running: 1
  Paused: 0
  Stopped: 0
 Images: 1
 Server Version: 28.0.4
 Storage Driver: overlayfs
  driver-type: io.containerd.snapshotter.v1
 Logging Driver: json-file
 Cgroup Driver: cgroupfs
 Cgroup Version: 1
```

5. Docker inspect

```
C:\Users\DYP-ATU>docker inspect ea1118cf8636
[
    {
        "Id": "ea1118cf8636ef5b98ff39a29837d3ca2aeb398d3ad9b99b228e53f80600a234",
        "Created": "2025-05-09T04:26:13.813274292Z",
        "Path": "/docker-entrypoint.sh",
        "Args": [
            "nginx",
            "-g",
            "daemon off;"
        ],
        "State": {
            "Status": "running",
            "Running": true,
            "Paused": false,
            "Restarting": false,
            "OOMKilled": false,
            "Dead": false,
            "Pid": 435,
            "ExitCode": 0,
            "Error": "",
            "StartedAt": "2025-05-09T04:26:14.13598374Z",
            "FinishedAt": "0001-01-01T00:00:00Z"
        },
        "Image": "sha256:c15da6c91de8d2f436196f3a768483ad32c258ed4e1beb3d367a27ed67253e66",
        "ResolvConfPath": "/var/lib/docker/containers/ea1118cf8636ef5b98ff39a29837d3ca2aeb398d3ad9b99b228e53f80600a234/resolv.conf",
        "HostnamePath": "/var/lib/docker/containers/ea1118cf8636ef5b98ff39a29837d3ca2aeb398d3ad9b99b228e53f80600a234/hostname",
        "HostsPath": "/var/lib/docker/containers/ea1118cf8636ef5b98ff39a29837d3ca2aeb398d3ad9b99b228e53f80600a234/hosts",
        "LogPath": "/var/lib/docker/containers/ea1118cf8636ef5b98ff39a29837d3ca2aeb398d3ad9b99b228e53f80600a234/ea1118cf8636ef5b98ff39a29837d3ca2aeb398d3ad9b99b228e53f80600a234-json.log",
        "Name": "/webserver",
        "RestartCount": 0,
        "Driver": "overlayfs",
        "Platform": "linux",
        "MountLabel": "",
        "ProcessLabel": "",
        "AppArmorProfile": "",
        "ExecIDs": null,
        "HostConfig": {
            "Binds": null,
            "ContainerIDFile": "",
            "LogConfig": {
                "Type": "json-file",
                "Config": {}
            },
            "NetworkMode": "bridge",
            "PortBindings": {
                "80/tcp": [
                    {
                        "HostIp": "",
                        "HostPort": "80"
```

6. Docker container