

Lab - Port Mapping

Part 1 — Run Nginx without port mapping (host curl should fail)

```
azureuser@vijaya-docker:~$ sudo docker container ls -a
CONTAINER ID        IMAGE               COMMAND             CREATED            STATUS              PORTS              NAMES
eedad263f2cc5      ubuntu              "/bin/bash"         8 minutes ago     Up 8 minutes          web-nomap
```

```
root@eedad263f2cc5:/# curl -s http://localhost | head -n1
<h1>Hello from INSIDE the container (no mapping)</h1>
```

```
azureuser@vijaya-docker:~$ curl -v http://localhost
* Host localhost:80 was resolved.
* IPv6: ::1
* IPv4: 127.0.0.1
*   Trying [::1]:80...
* connect to ::1 port 80 from ::1 port 58566 failed: Connection refused
*   Trying 127.0.0.1:80...
* connect to 127.0.0.1 port 80 from 127.0.0.1 port 60806 failed: Connection refused
* Failed to connect to localhost port 80 after 0 ms: Couldn't connect to server
* Closing connection
curl: (7) Failed to connect to localhost port 80 after 0 ms: Couldn't connect to server
```

```
azureuser@vijaya-docker:~$ sudo docker rm -f web-nomap
web-nomap
```

Part 2 — Run Nginx with port mapping (host curl should work)

```
azureuser@vijaya-docker:~$ sudo docker container ls -a
CONTAINER ID        IMAGE               COMMAND             CREATED            STATUS              PORTS              NAMES
38beb38b6c1d      ubuntu              "/bin/bash"         12 seconds ago    Up 11 seconds     0.0.0.0:8080->80/tcp, [::]:8080->80/tcp   web-mapped
```

```
azureuser@vijaya-docker:~$ sudo docker exec web-mapped curl -s http://localhost | head -n1
<h1>Hello from a mapped port (8080->80)</h1>
```

```
azureuser@vijaya-docker:~$ sudo docker rm -f web-mapped
web-mapped
```