• P3: What is the rest of Docker Networks ? “Name and Definition”

1. Overlay Network

- **Name:** `overlay`
- **Definition:** Used for multi-host networking. Overlay networks enable containers running on different Docker hosts to communicate with each other. This is typically used with Docker Swarm or Kubernetes to enable networking across a cluster of Docker hosts.

2. Macvlan Network

- **Name:** `macvlan`
- **Definition:** Assigns a unique MAC address to each container, making it appear as a physical network interface on the network. This allows containers to be accessed directly on the physical network, making them appear as if they are separate devices on the network.

3. None Network

- **Name:** `none`
- **Definition:** Disables all networking for the container. The container has no network interfaces, meaning it cannot communicate with other containers or the outside world. This is useful for isolating the container from all network traffic.

4. None Network

- **Name:** `none`
- **Definition:** Disables all networking for the container. The container will have no network interfaces and cannot communicate with other containers or external networks. This can be useful for isolating a container from network traffic.

5. User-defined Network

- **Name:** User-defined (various names based on configuration)
- **Definition:** Custom networks created by users with specific configurations and settings. They can be bridge, overlay, or macvlan networks and allow for more granular control over network settings. User-defined networks can be used to create networks with specific subnet and gateway configurations.

Key Points to Remember:

- **Bridge Networks:** Provide basic container-to-container communication on a single host.
- **Host Networks:** Use the host’s network stack, bypassing Docker’s virtual network interfaces.

- **Overlay Networks:** Enable communication between containers across multiple hosts, typically used in swarm mode.
- **Macvlan Networks:** Allow containers to have their own IP addresses and appear as separate devices on the physical network.
- **None Networks:** Disable all networking for containers.