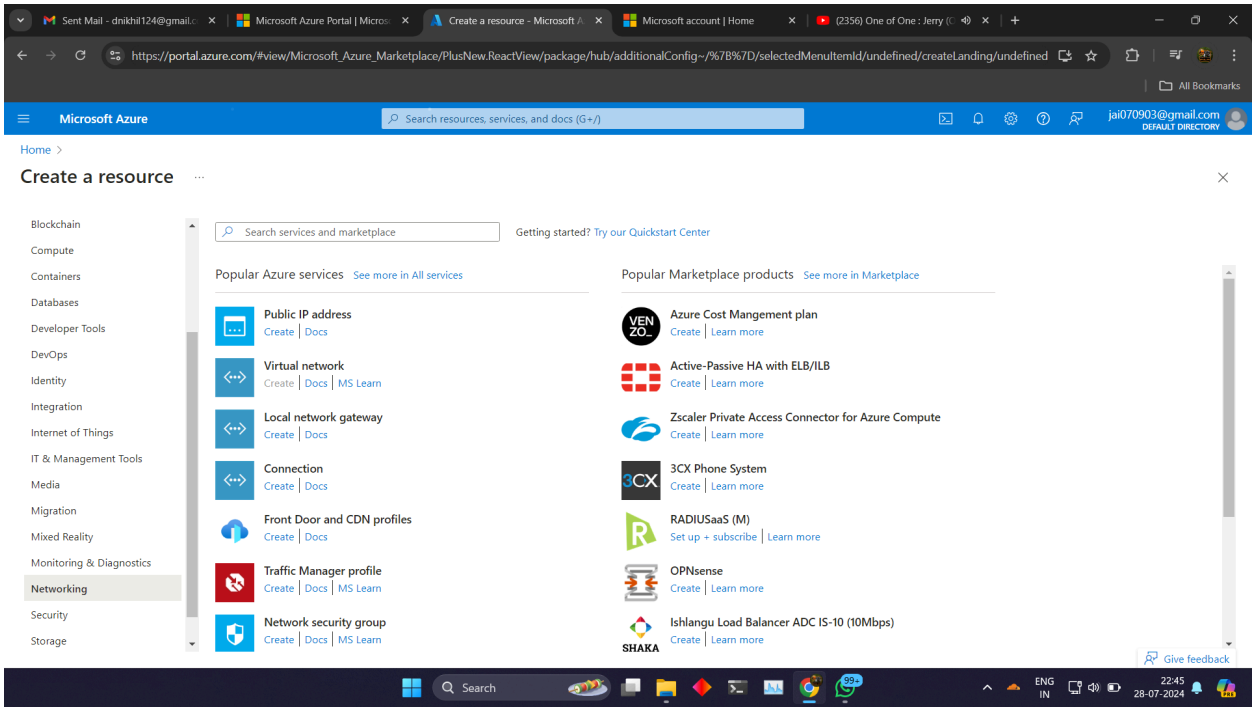
FINAL CSI ASSIGNMENT
Name – NIKHIL DEV(CT_CSI_CI_3442)

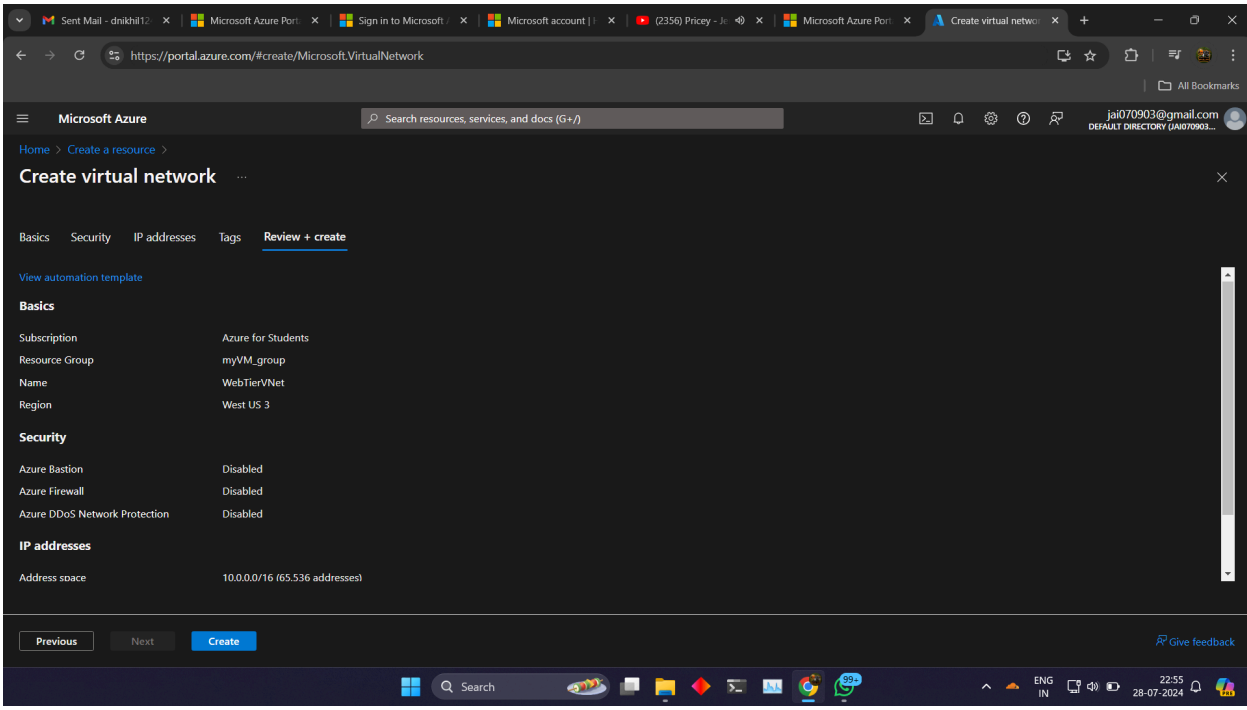
1. Choose a Cloud Provider and Region

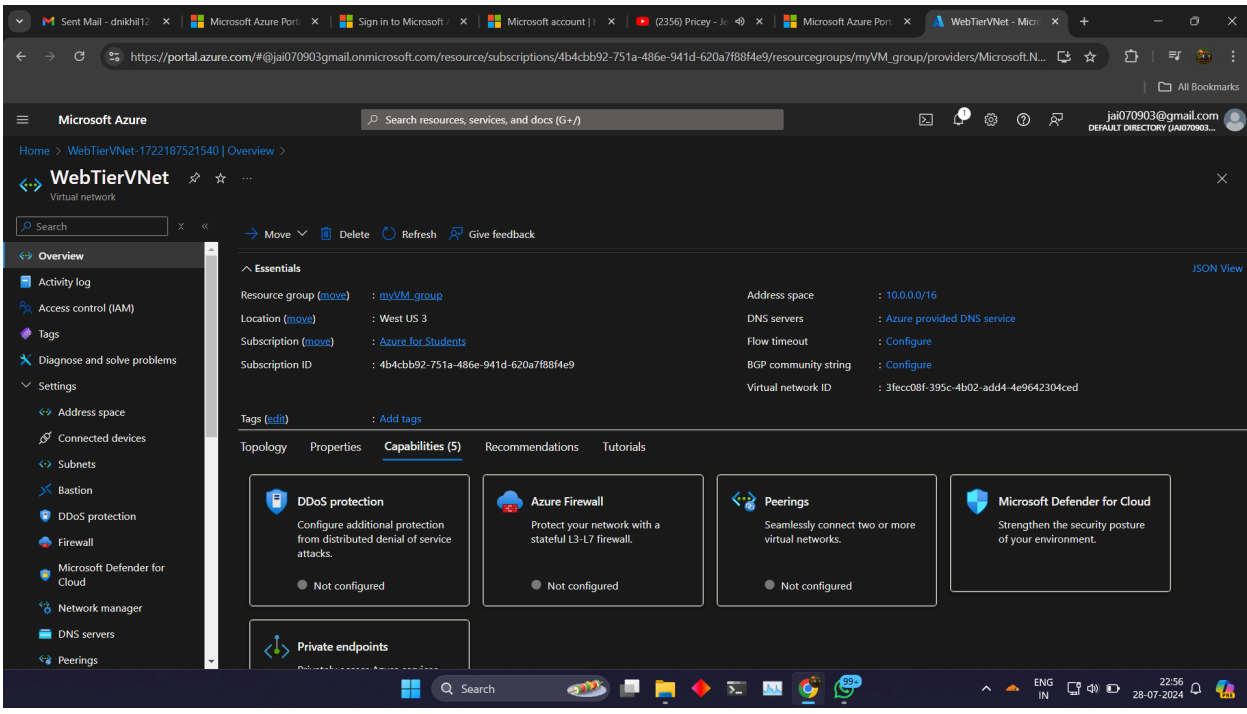
- **Cloud Provider:** Select Microsoft Azure.
- **Region:** Choose a region based on factors like data residency, latency, and cost. Examples include:
  - **US:** East US, West US, Central US
  - **Europe:** West Europe, North Europe
  - **Asia Pacific:** East Asia, Southeast Asia



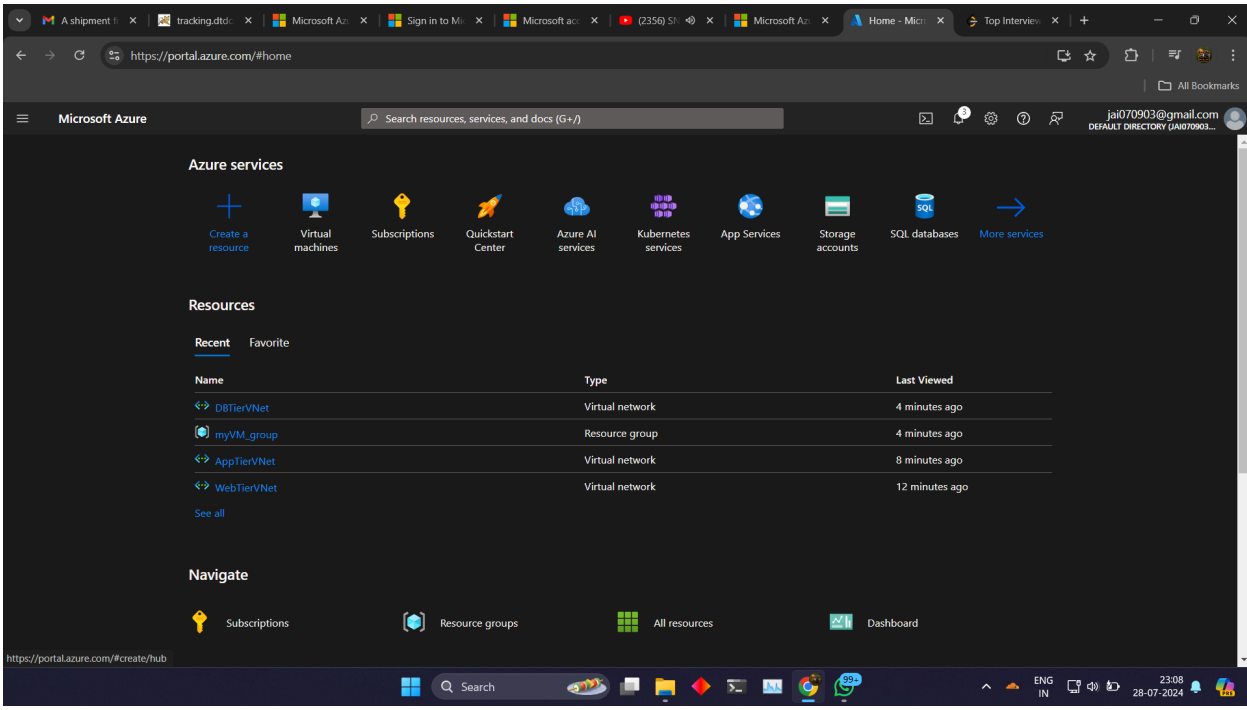
2. Setup Virtual Networks and Subnets

- **Create three Virtual Networks (VNets):**
  - **WebTierVNet** in selected region.

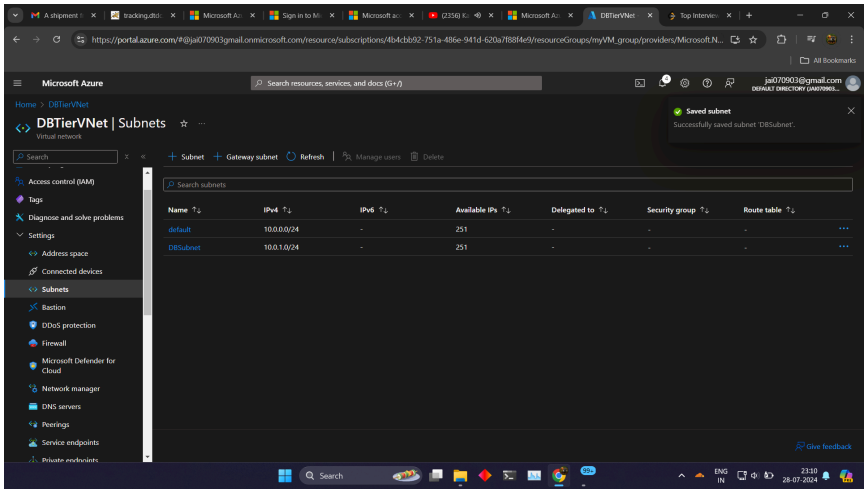
- 

- **AppTierVNet** in the same region.
- 

- **DBTierVNet** in the same region.



- **Create subnets within each VNet:**
  - **WebTierVNet:**
    - **WebSubnet:** For web servers.
  - **AppTierVNet:**
    - **AppSubnet:** For application servers.
  - **DBTierVNet:**
    - **DBSubnet:** For database servers.



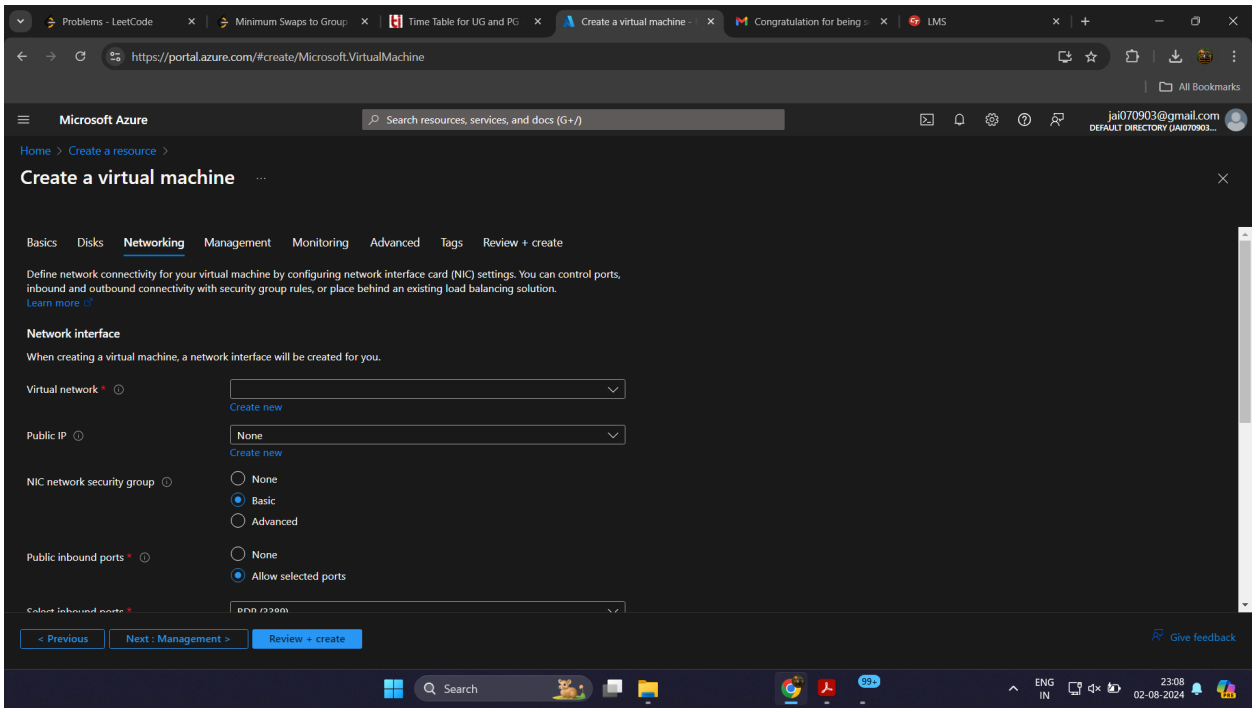
3. Create a Virtual Network (VNet) and SubneT

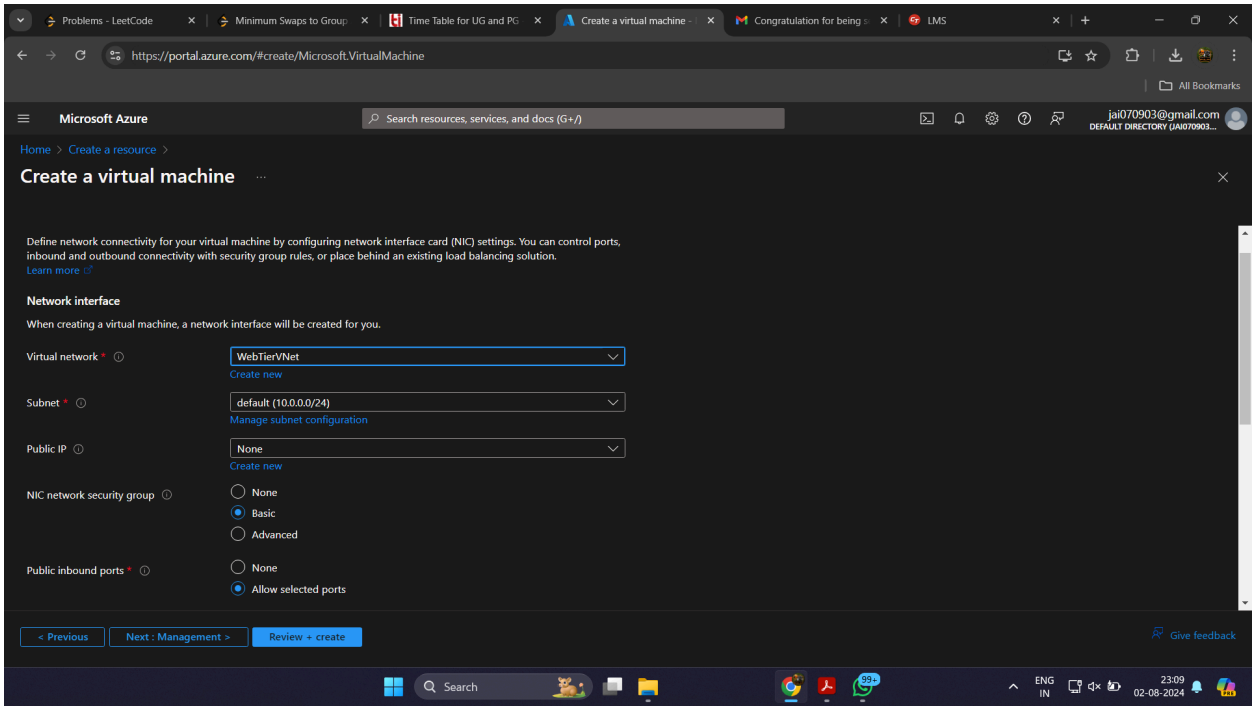
- Click on "Create a resource" and search for "Virtual network".
- Fill in the necessary details:
    - Resource group: Create a new resource group or use an existing one.
    - Virtual network name: Give it a suitable name (e.g., WebTierVNet).
    - Address space: Choose a private IP address range (e.g., 10.0.0.0/16).
    - Subnet: Create a subnet named "WebSubnet" with a suitable address range (e.g., 10.0.1.0/24).
- Click "Create".

4. Create a Virtual Machine

- Click on "Create a resource" and search for "Virtual machine".
- Fill in the necessary details:
    - Resource group: Select the same resource group as the VNet.
    - Virtual machine name: Give it a suitable name (e.g., WebServer01).
    - Image: Choose a Windows Server image (e.g., Windows Server 2022 Datacenter).
    - Virtual machine size: Select a suitable size based on expected traffic. Refer to Azure pricing calculator for guidance.
    - Availability options: Consider using Availability Sets or Virtual Machine Scale Sets for high availability.
    - Networking:
        - Select the created VNet (WebTierVNet).
        - Select the created subnet (WebSubnet).

        - Public IP address: If required for external access, assign a public IP address.
    - Storage: Choose a storage account type based on performance requirements.
    - OS disks: Select the OS disk type and size.
    - Network security group: Create or use an existing NSG to define inbound and outbound network traffic rules.
    - Management: Configure remote desktop access if needed.
- Click "Create".





3. Connect to the VM

- Once the VM is created, connect to it using Remote Desktop Protocol (RDP).

4. Install IIS

- Open Server Manager.
- Navigate to "Manage" -> "Add Roles and Features".
- Select "Web Server (IIS)".
- Follow the installation wizard, selecting the desired IIS features.

5. Basic IIS Configuration

- Open IIS Manager.
- Create a website or virtual directory to host your web content.
- Configure bindings (HTTP, HTTPS) as required.
- Configure default documents (index.html, index.htm, etc.).
- Configure error pages.

Additional Considerations

- **Security:** Implement security best practices for IIS, including strong passwords, regular updates, and firewall rules.
- **Performance:** Optimize IIS configuration for performance based on workload characteristics.
- **High Availability:** Consider using load balancers, availability sets, or virtual machine scale sets for high availability.
- **Monitoring:** Implement monitoring to track VM performance and IIS health.
- **Cost Optimization:** Choose appropriate VM size and storage options based on workload requirements.