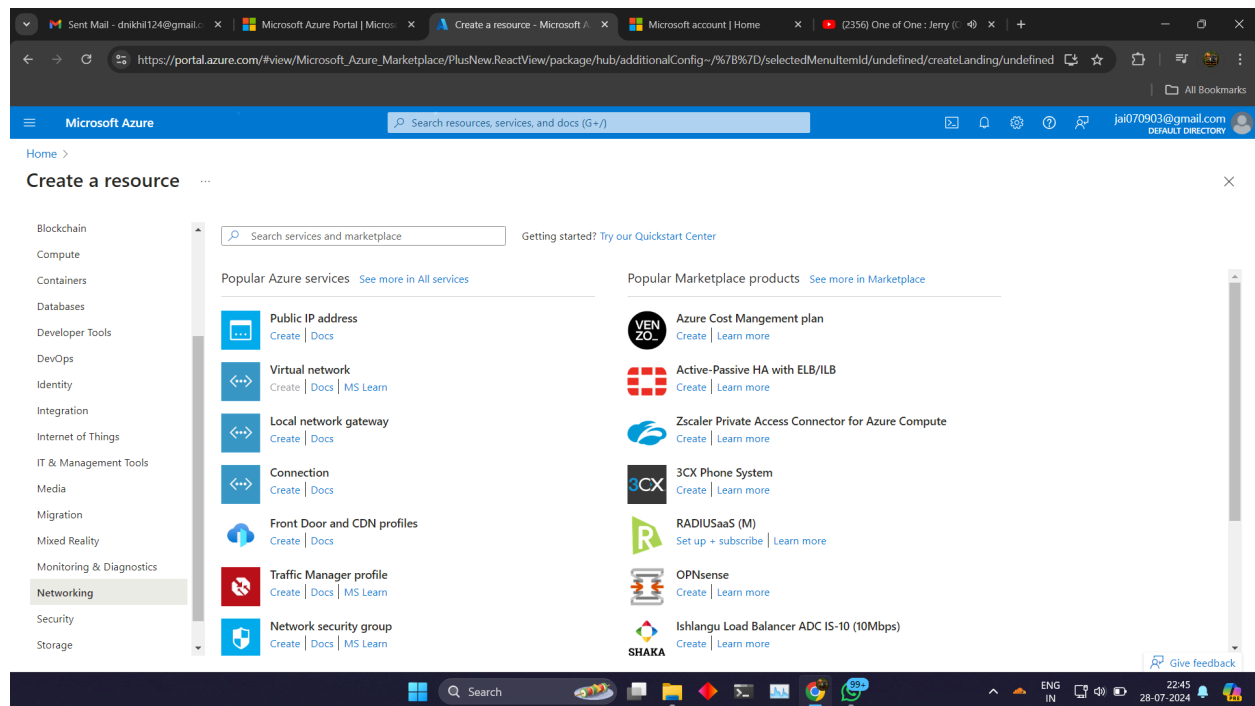


# FINAL CSI ASSIGNMENT

## Name – NIKHIL DEV(CT\_CSI\_CI\_3442)

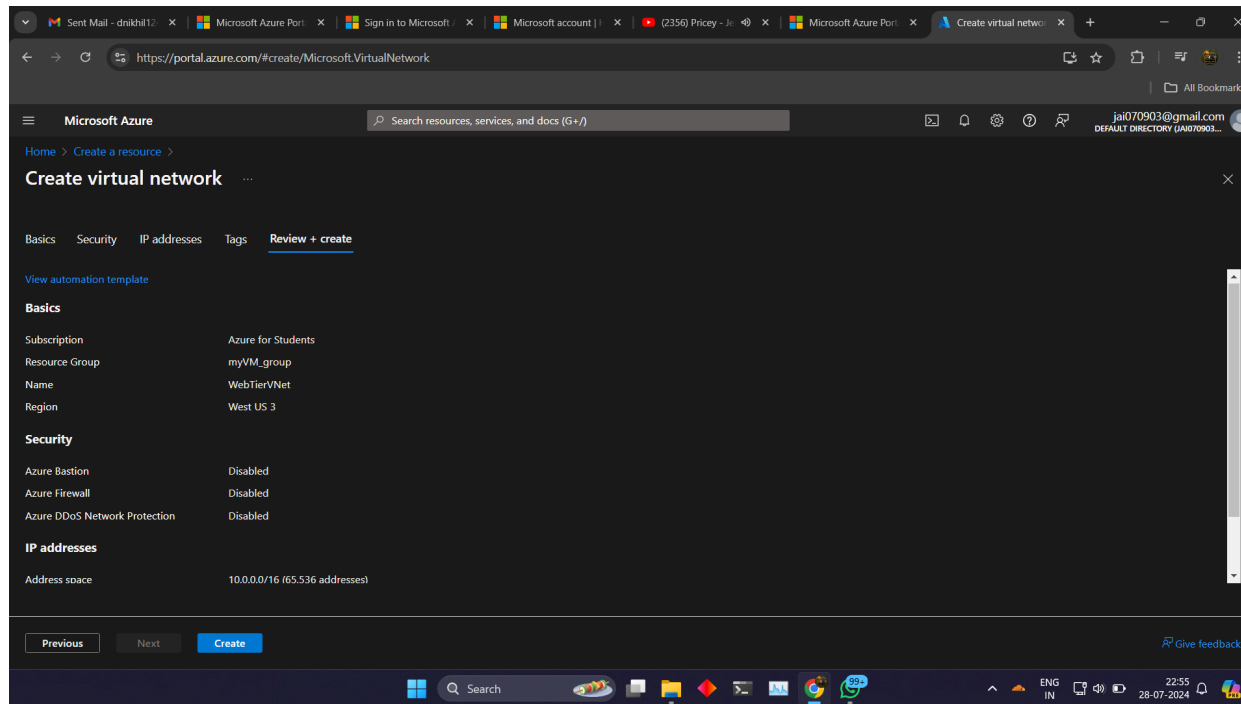
### 1. Choose a Cloud Provider and Region

- **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

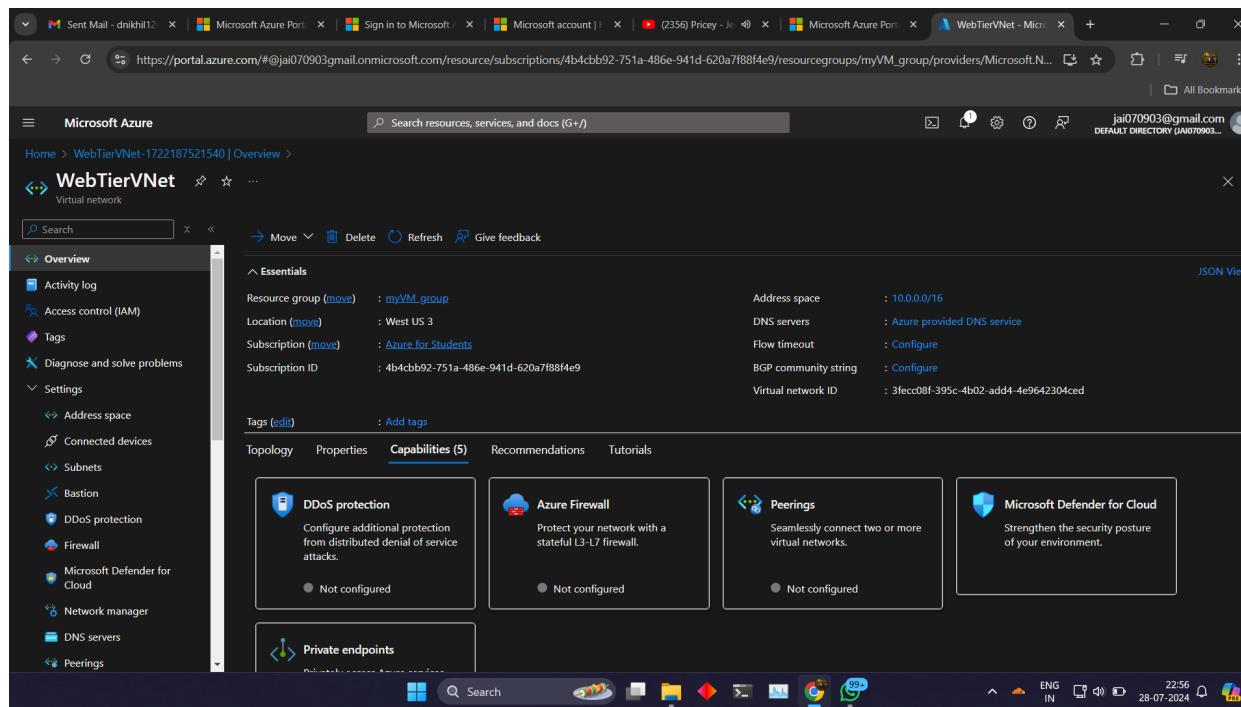


### 2. Setup Virtual Networks and Subnets

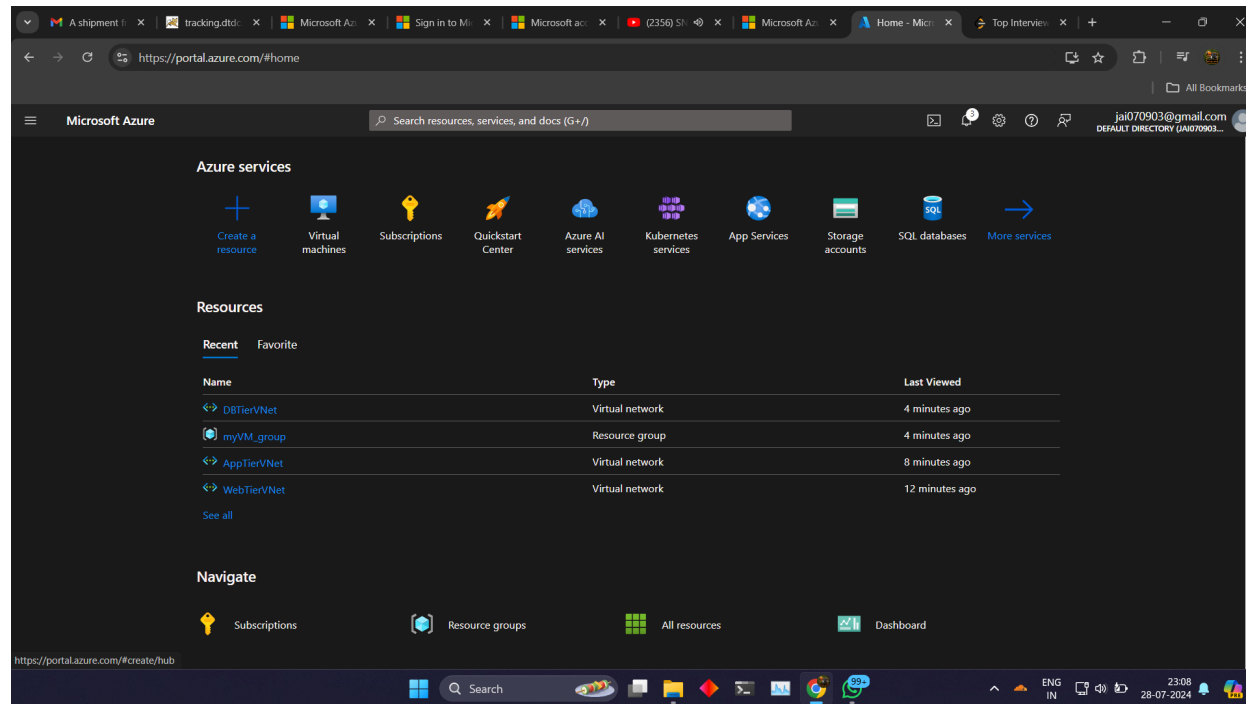
- **Create three Virtual Networks (VNETs):**
  - **WebTierVNet** in selected region.



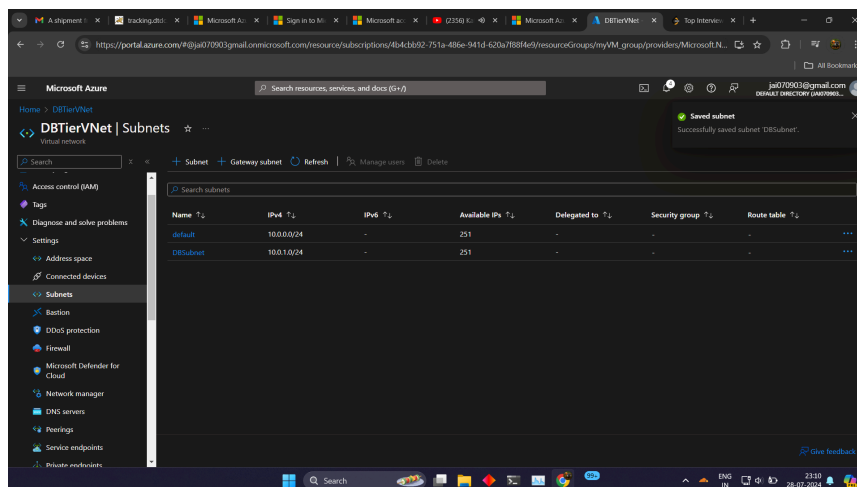
- 
- **AppTierVNet** in the same region.



- 
- **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

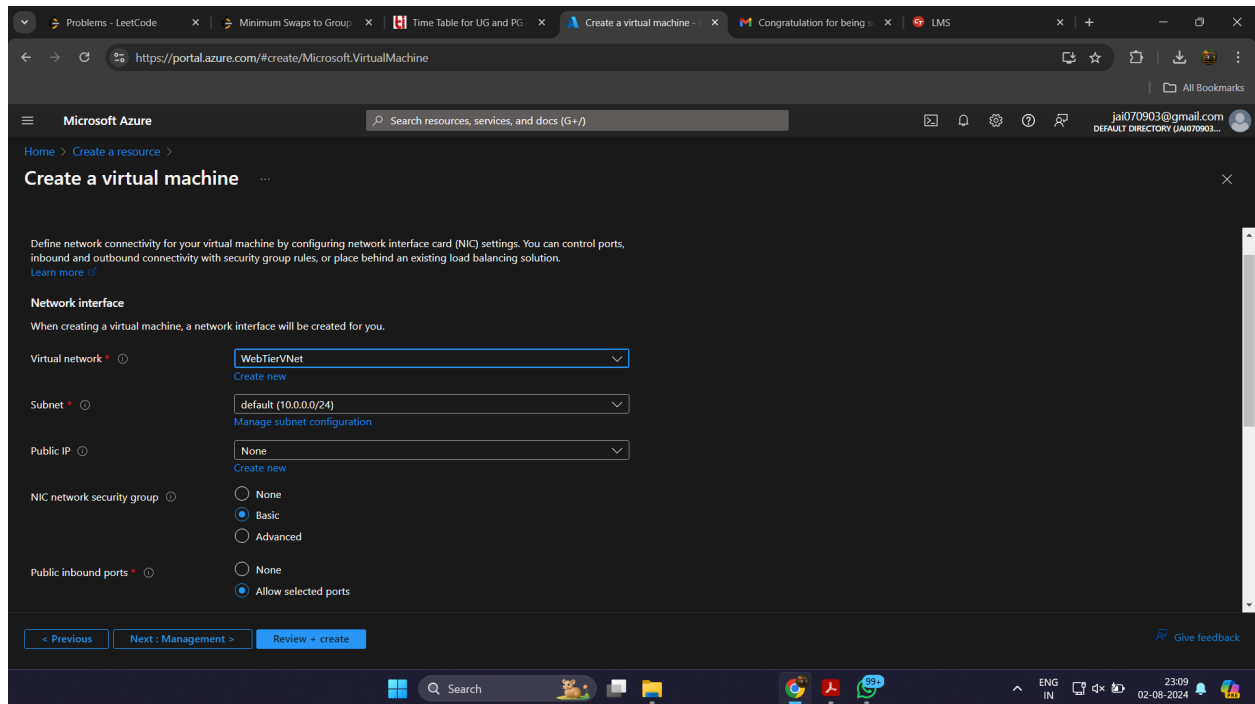
- Click on "Create a resource" and search for "Virtual network".
- Fill in the necessary details:
  - Resource group: Create a new resource group or use an existing one.
  - Virtual network name: Give it a suitable name (e.g., WebTierVNet).
  - Address space: Choose a private IP address range (e.g.,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

The screenshot shows the 'Create a virtual machine' wizard in the Microsoft Azure portal, with the 'Networking' tab selected. The page is titled 'Create a virtual machine' and includes a search bar and user profile information (jai070903@gmail.com). The 'Networking' tab is active, showing options for configuring network connectivity. The 'Virtual network' dropdown is set to 'None' with a 'Create new' link. The 'Public IP' dropdown is also set to 'None' with a 'Create new' link. The 'NIC network security group' section has three radio button options: 'None', 'Basic' (which is selected), and 'Advanced'. The 'Public inbound ports' section has two radio button options: 'None' and 'Allow selected ports' (which is selected). At the bottom, there are navigation buttons: '< Previous', 'Next: Management >', and 'Review + create'. A 'Give feedback' link is also present.



### **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.