Name - **SAUNDARYA**
Registered Email - **1806516@kiit.ac.in**
Topic - **Microsoft Azure Cloud Computing (June-July '20)**

Under guidance of - **Mr. Rajdeep Das Sir (Verzeo)**
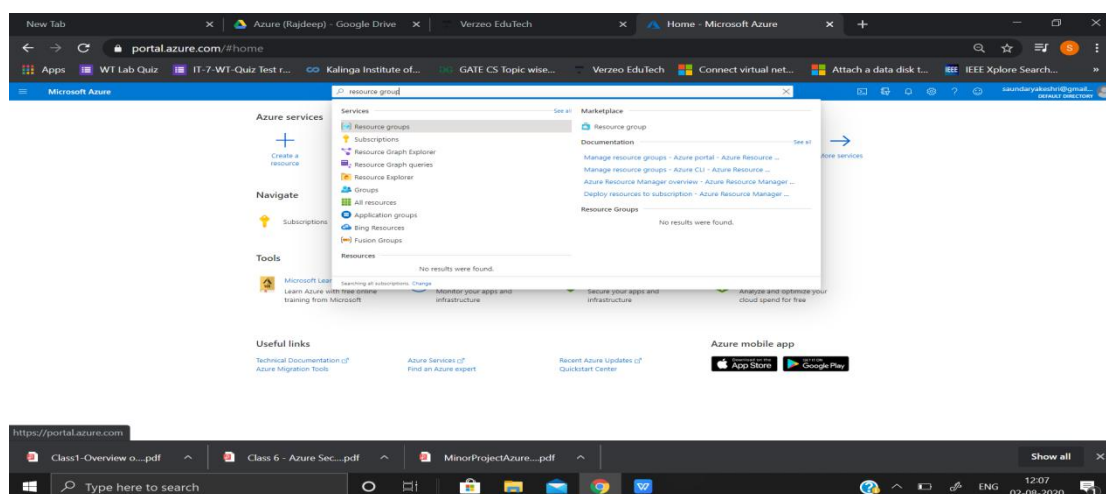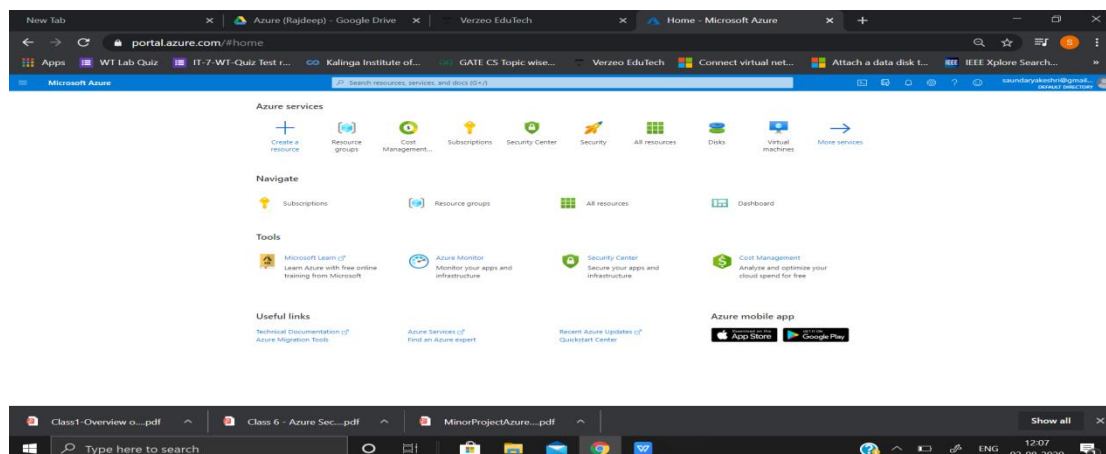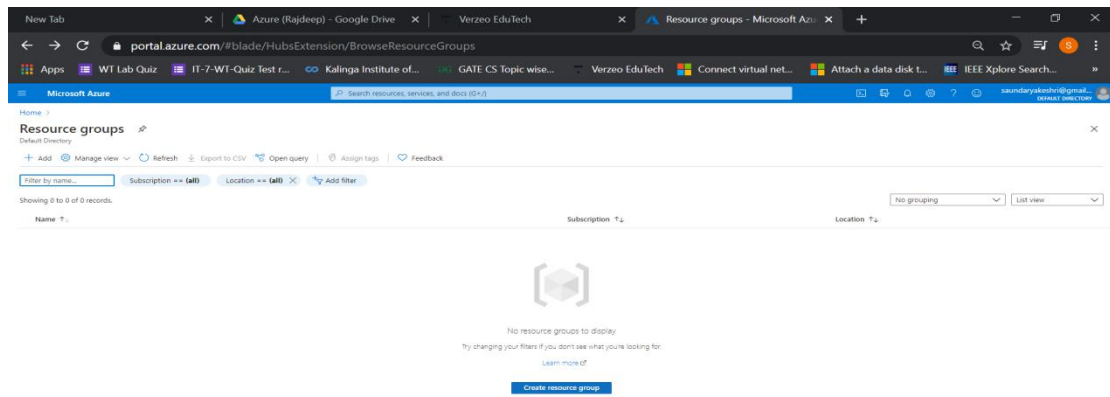
Minor Project 02

- Creating a Resource Group

➢ Resource group are like folders which contain all resources (Virtual Networks , Virtual Machines etc)

------- It is a container that holds related resources for an Azure solution. The resources group can include all the resources for the solution, or only those resources that you want to manage as a group. You decide how you want to allocate resources to resource group based on what makes the most sense for your organization.

➢ How to create Resource group:
1. Sign in to the Azure portal at__ https://portal.azure.com
2. From the All services blade,search for and select **Resource Group**,and then click**+Add.**
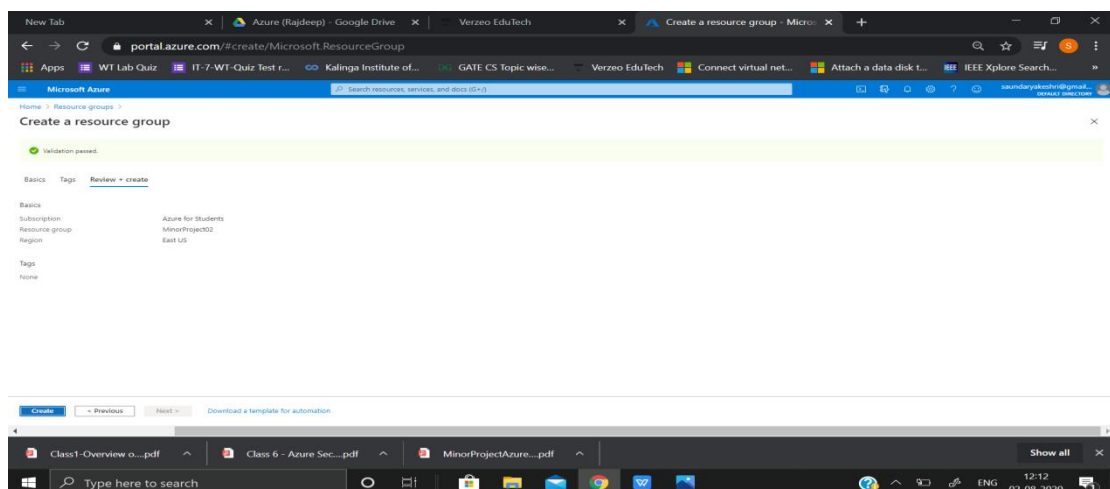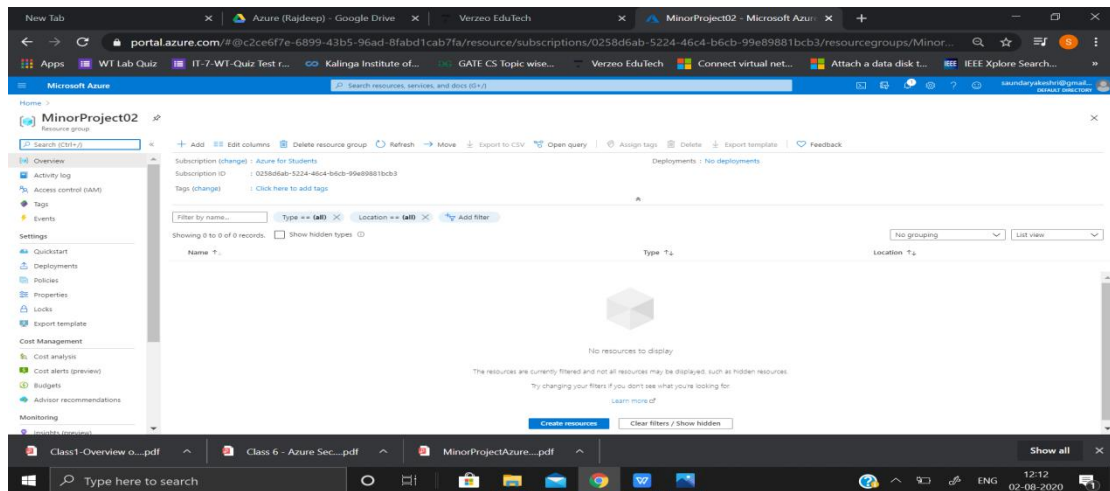
3. Fill the required details such as - Resource Group name , Region.
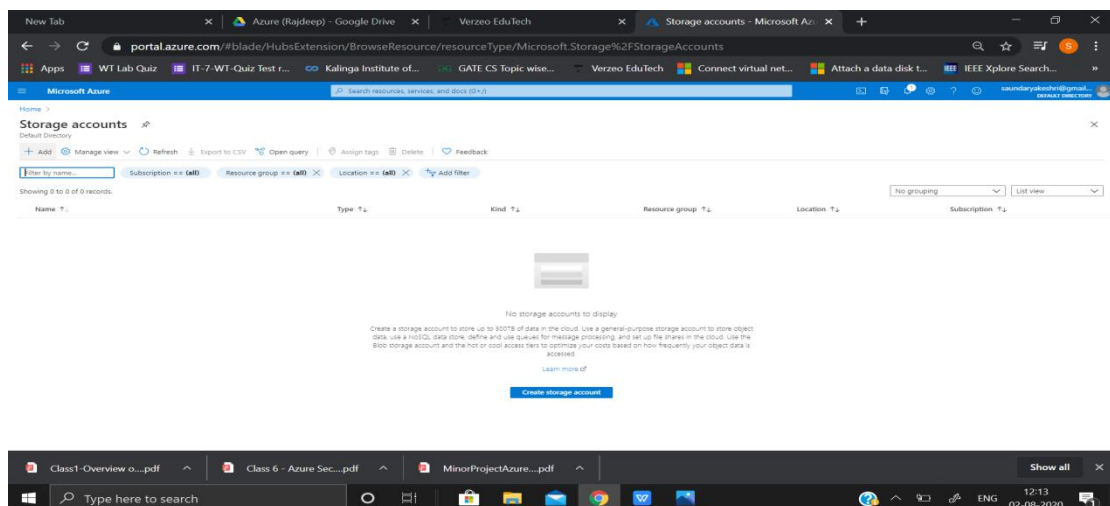4. Click the **Review + create** button
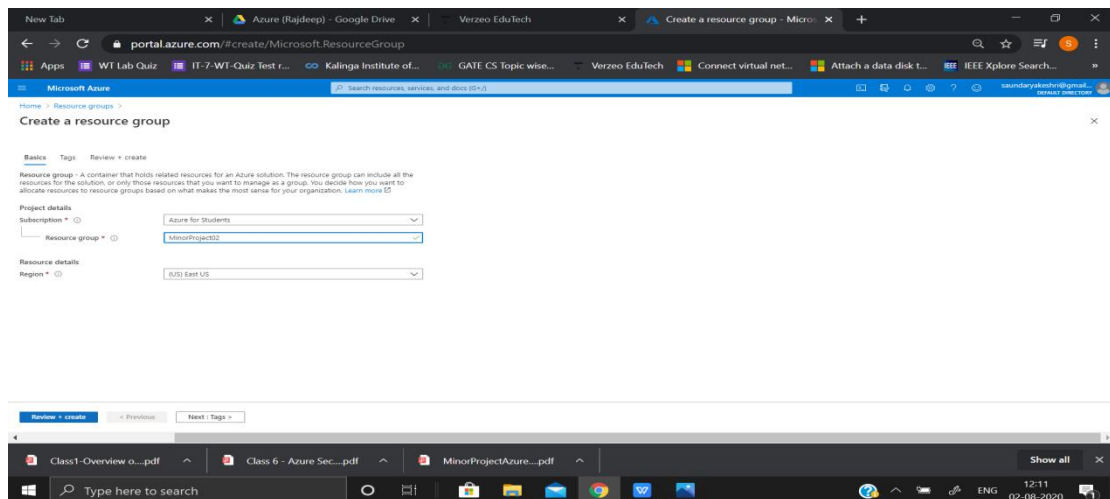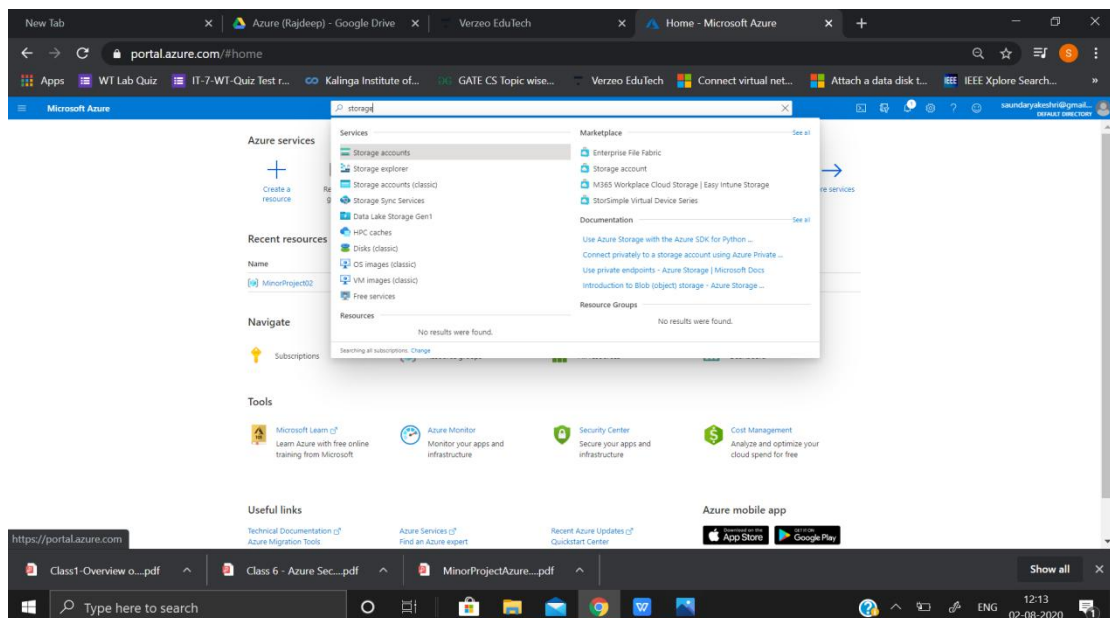

4. After the <mark>Validation is passed</mark> click on **Create**
5. The Resource group named as **MinorProject02** is created.

- Creating a Storage Account

1.From the **All services** blade, search for and select **Storage accounts**, and then click **+ Add**.

2. Enter the following information and click on **Next: Networking**

3. Select the appropriate option under **Networking** and click on **Next:Data protection**

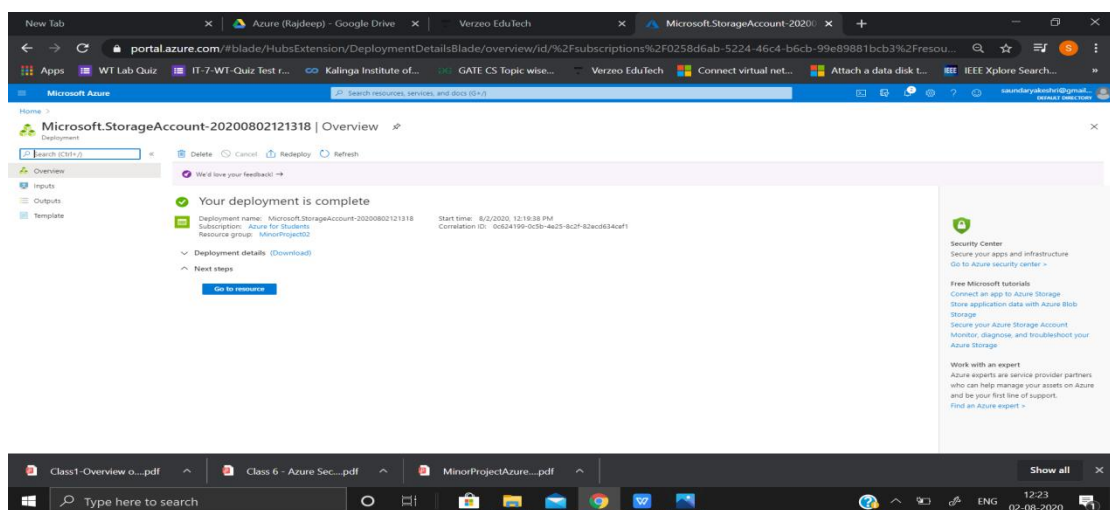4. Select the appropriate option under **Data protection** and click on **Next: Advanced**
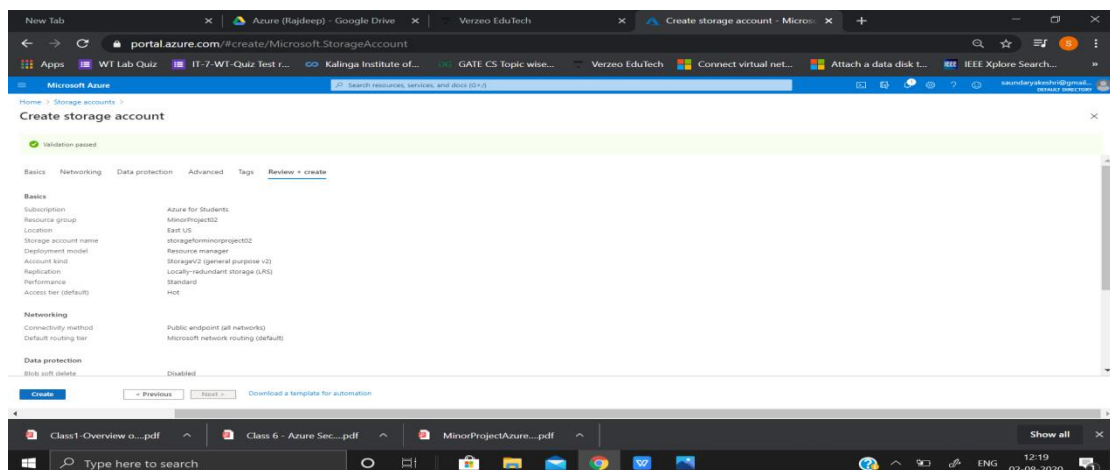
5. Select the appropriate option under **Advanced** and click on **Review + create**
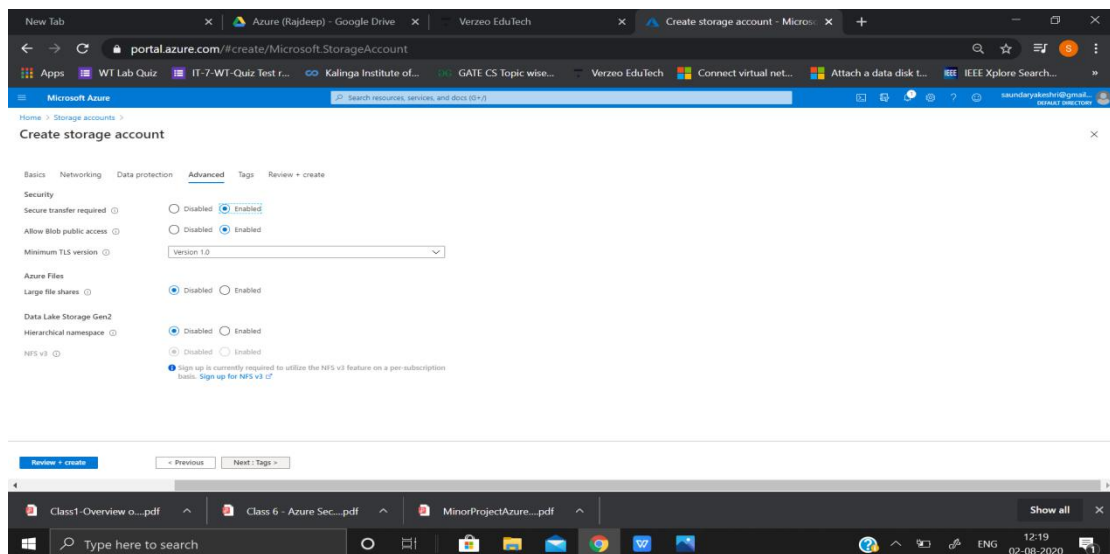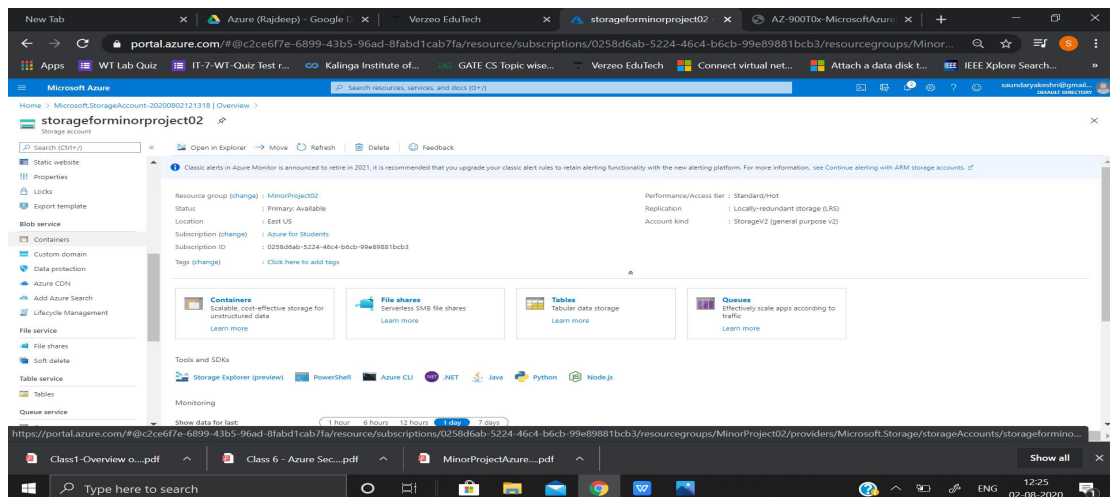

6. After the <mark>Validation is passed</mark> click on **Create .**
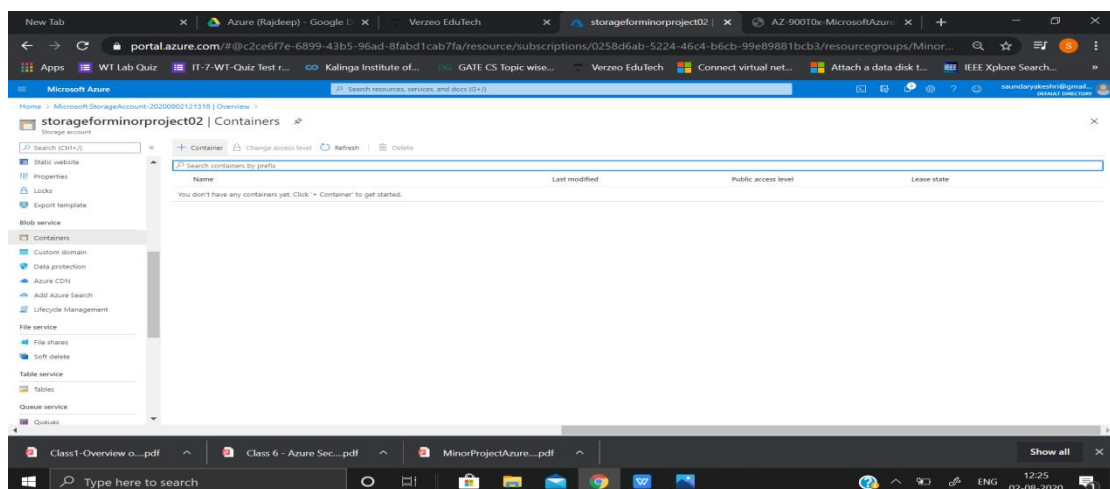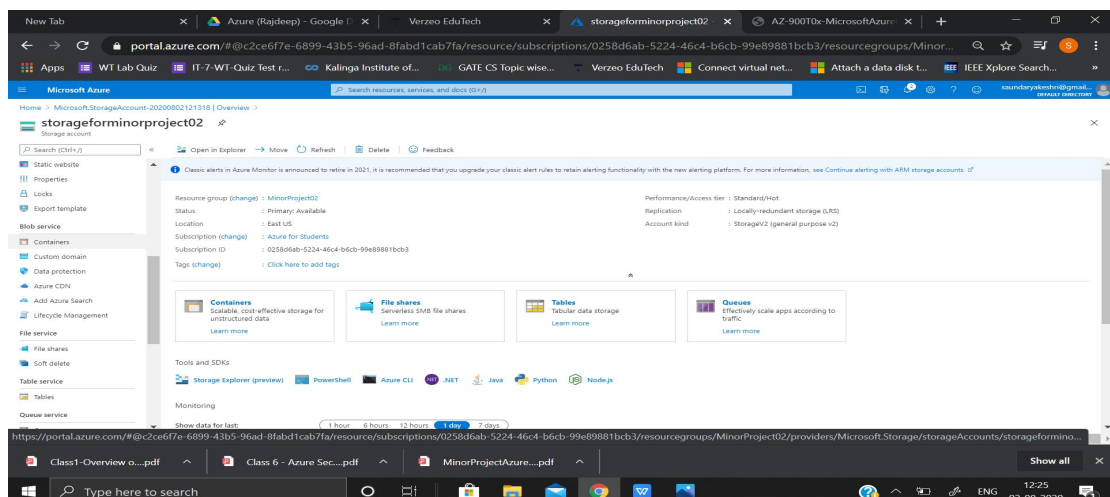7. Wait for deployment to complete.

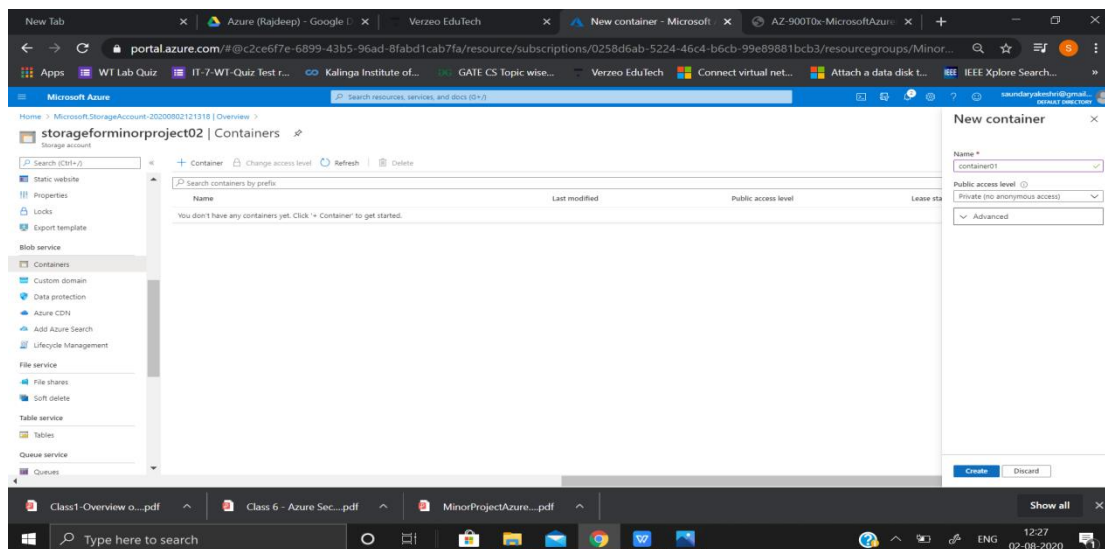8. The Storage group named as **storageforminorproject02** is created.

- Creating a Container and upload a file in the BLOB

1.Go to the created Storage account- **storageforminorproject02** and scroll to the **Blob service** section, and then click **Containers**.
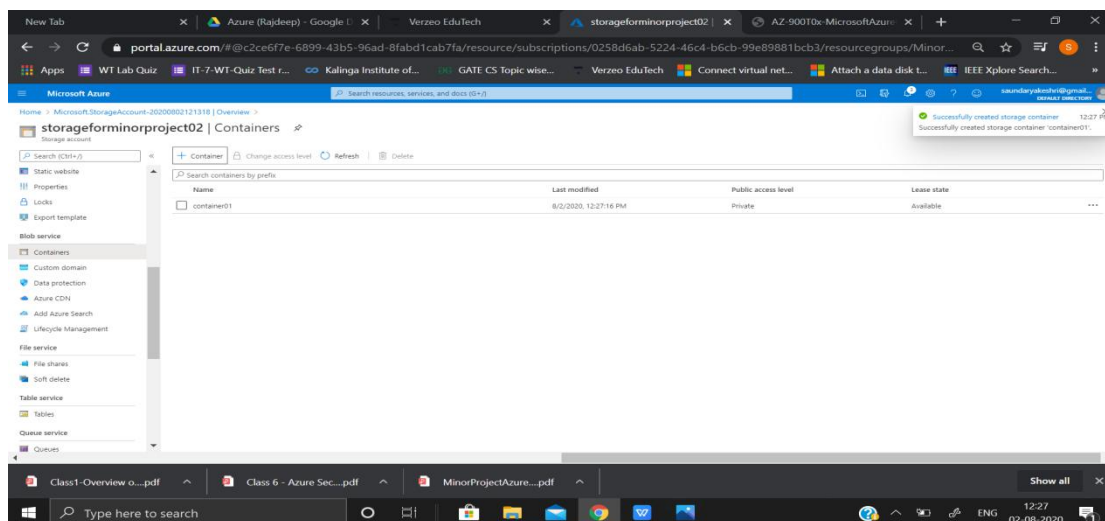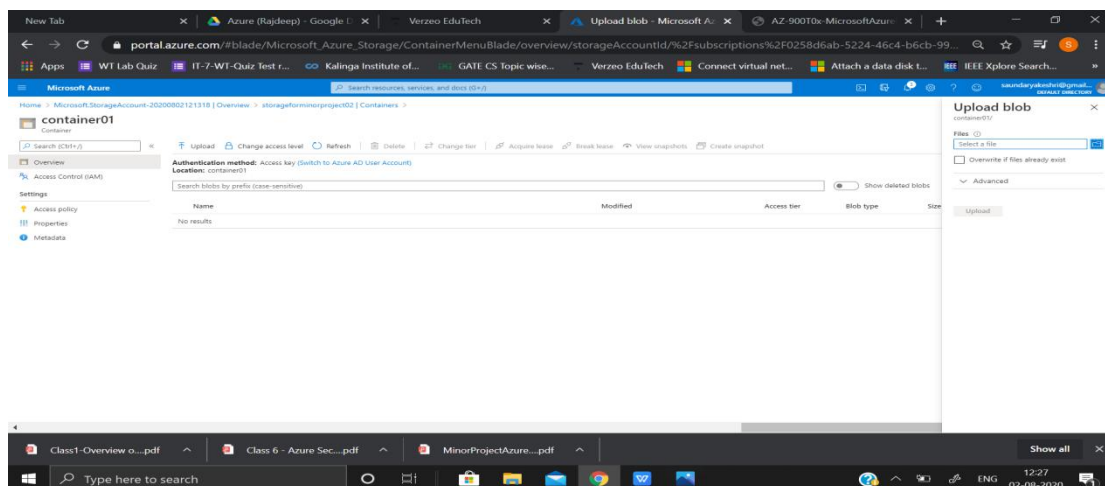
2. Click **+ Container** and fill the information. When done click on **create**

3. The container named **container01** is created.

4. Click on the container created i.e **container01** and click on **Upload**

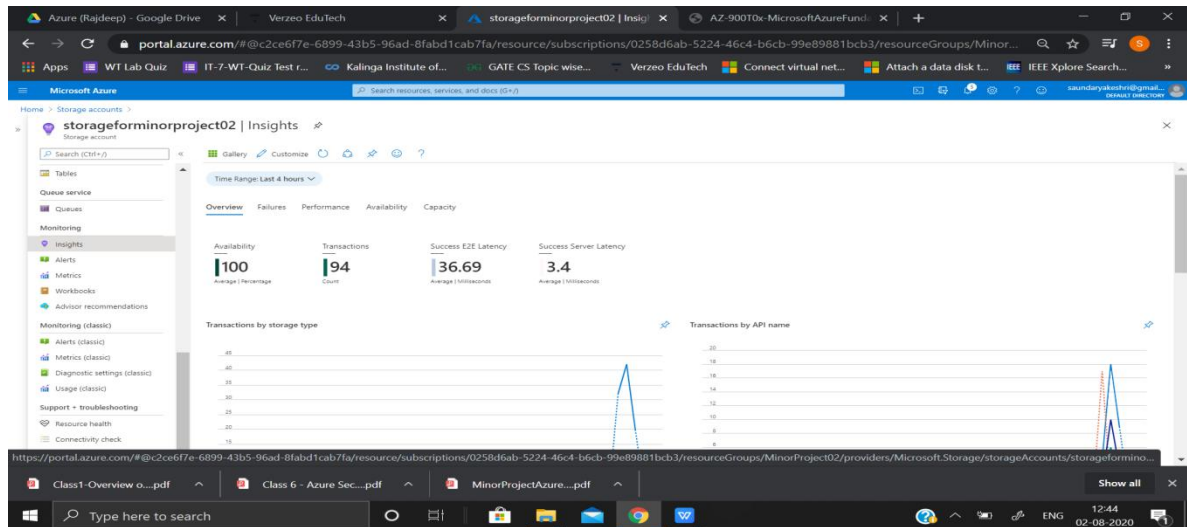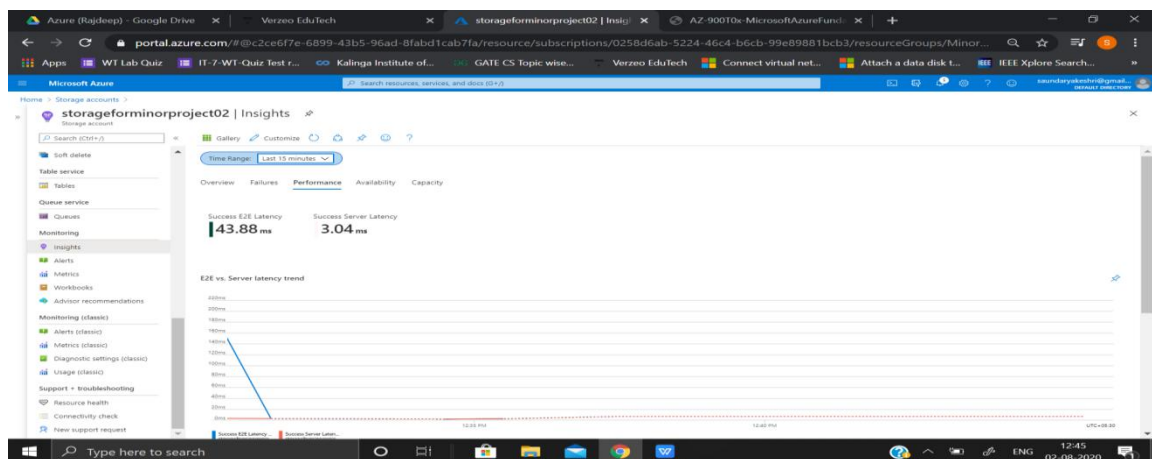5. Browse to a file in our system and click on **upload**

- Monitor the storage account

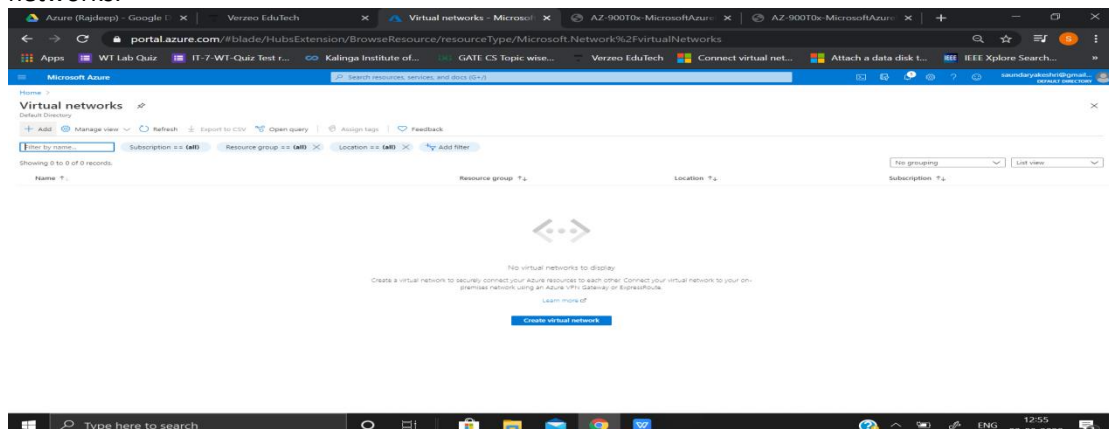1. On the storage account blade, scroll down to the **Monitoring** section and click **Insights.**

2. We can also set the **Time Range.**

- Creating VNets containing 1 Subnets

1. From the created Resource group(MinorProject02) click on **+Add**,search for and select Virtual networks.

2. We name the VNet as - **VNet_minorP2** with a reserved CIDR block of *192.168.0.0/16* containing 1 subnets

    a. **Subnet1**, using *192.168.1.0/24* as its CIDR block.

3. Click on **Next: IP Addresses**

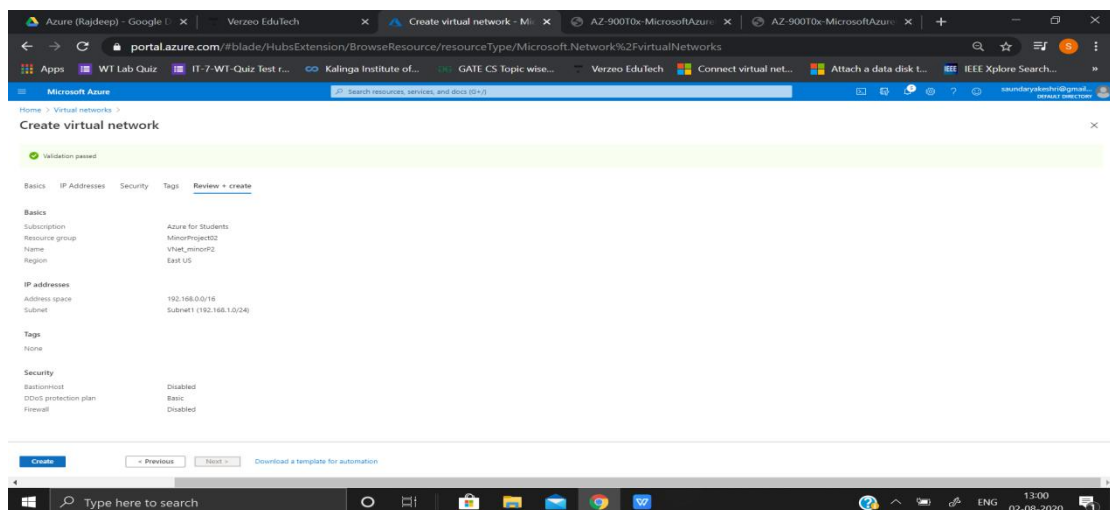4. After creating the subnet - **Subnet1** click on **Next:Security**

5. Under **Security** - no changes, click on **Next: Tags**
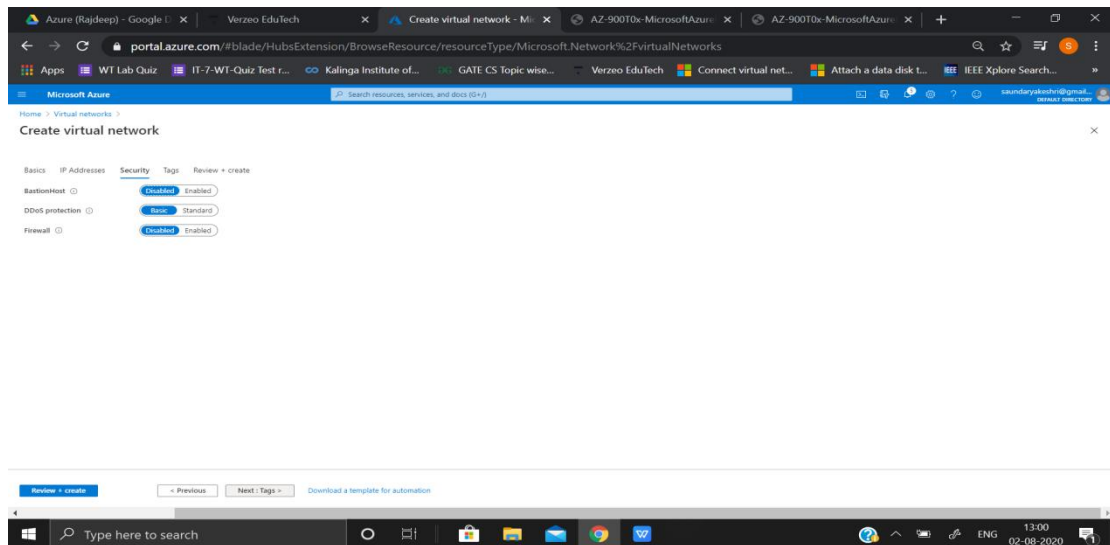
6. Under **Tags** - no change,click on Next: **Next: Review + Create**
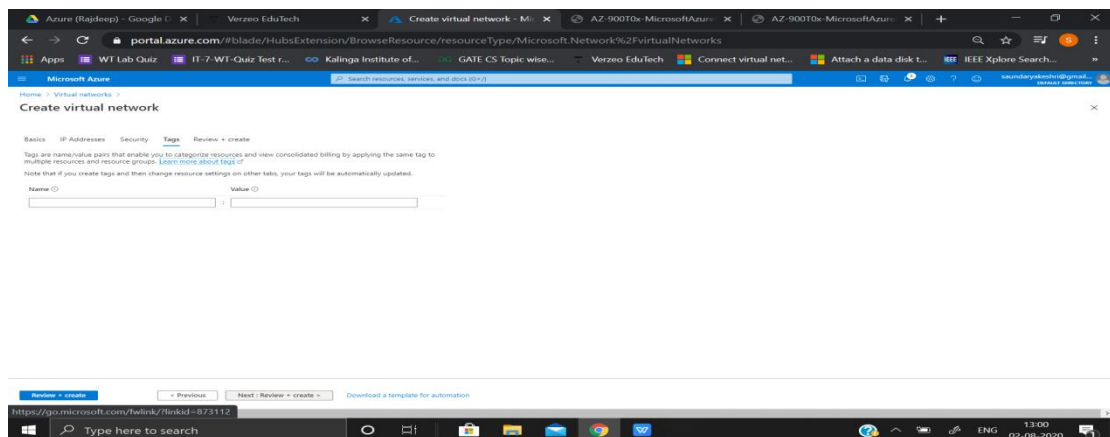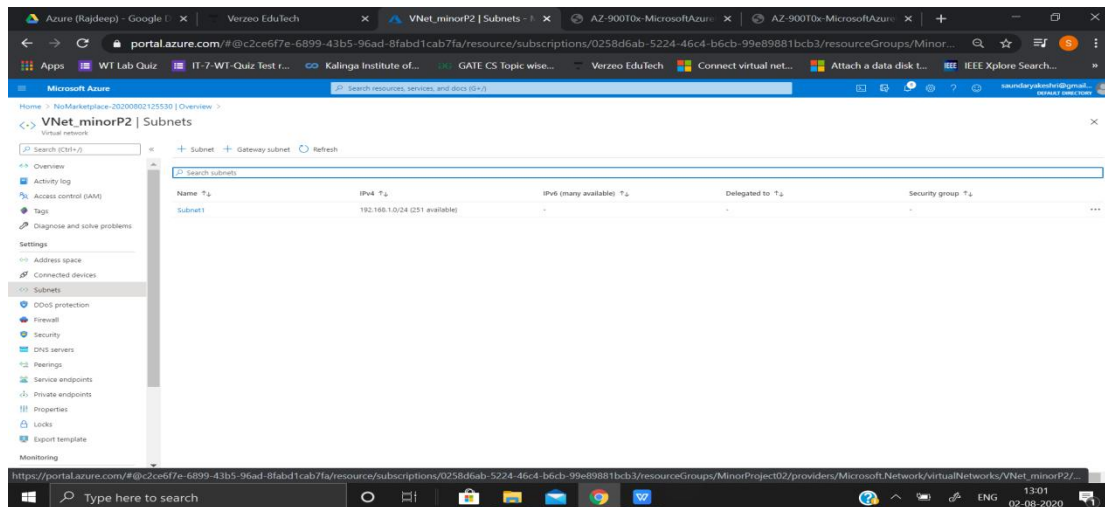

7. After the ==Validation is passed== click on **Create**

8. Wait for deployment to complete.

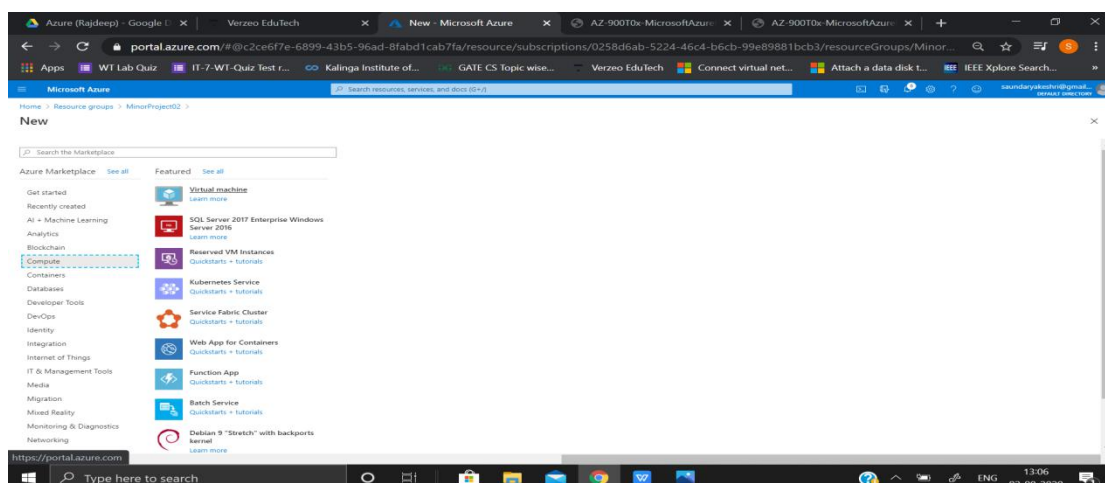9. Thus, **VNet_minorP2** is created having 1 subnet - **Subnets1**

-Creating Virtual Machine

1. From the All services blade, search for and select **Resource Group** , and select the resource group that we have created (ex. **MinorProject02**)
2. To create Virtual Machine **VM02** for **VNet_minorP2 .** Select **VNet_minorP2**
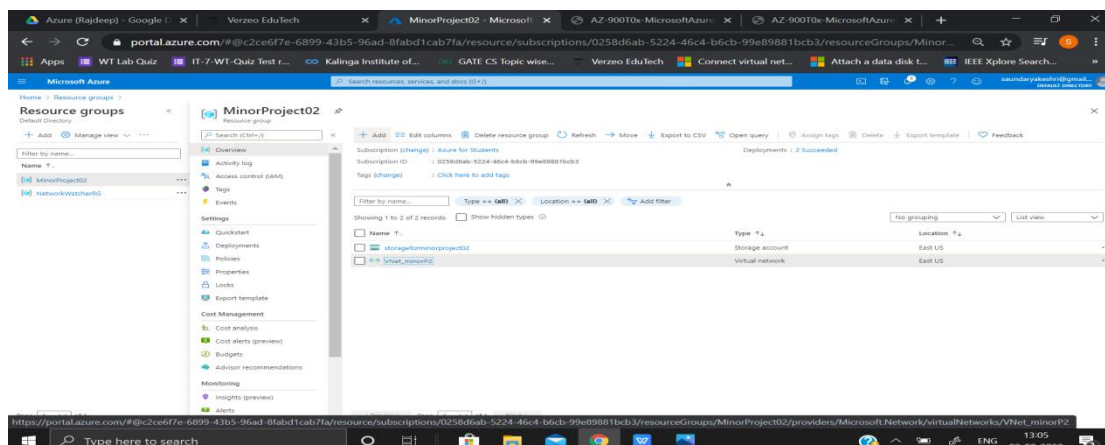
3. Select **Compute**, and select **Virtual Machine**.

4. Enter the following information under **Basics**, and click on **Next: Disks**

5. Under Disk select OS disk type as **Standard HDD,** keep the remaining as default and then click on **Next: Networking.**

6. Enter the following information under **Networking**, and click on **Next: Management**

7. In the management section turn everything **Off,** and click on **Review + create.**

8. After the verification is passed.
9. Click on **Create.** Wait for the **VM02** to **deploy**

-Connect to the virtual machine

1. After the deployment is done for the VM click on **connect** (Ensure that the VMs are in Running status if not click on **start**)
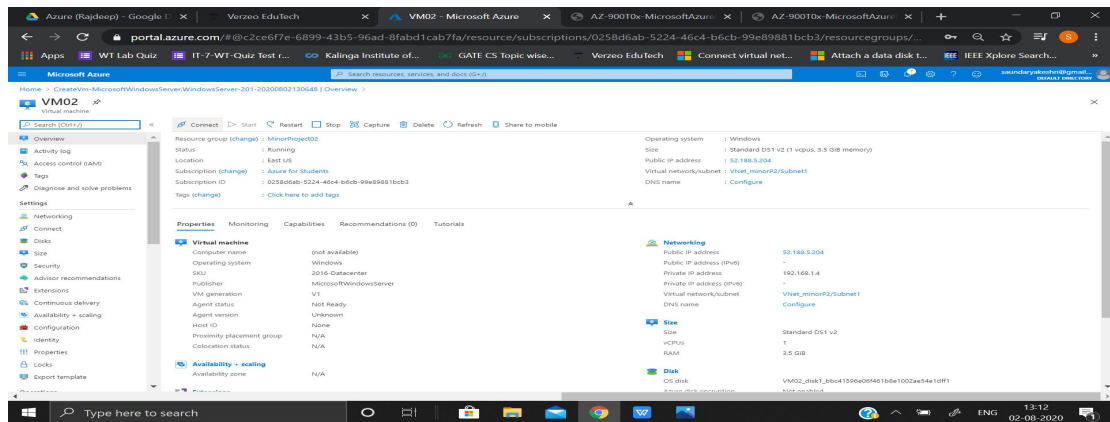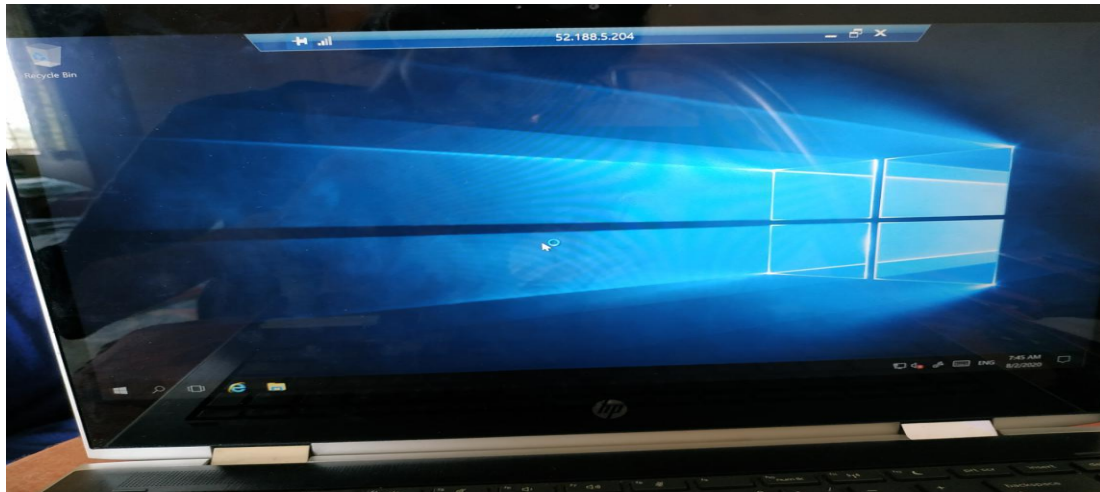

2. Connect as **RDP** (for VM of Windows)
3. **Download the RDP file**.
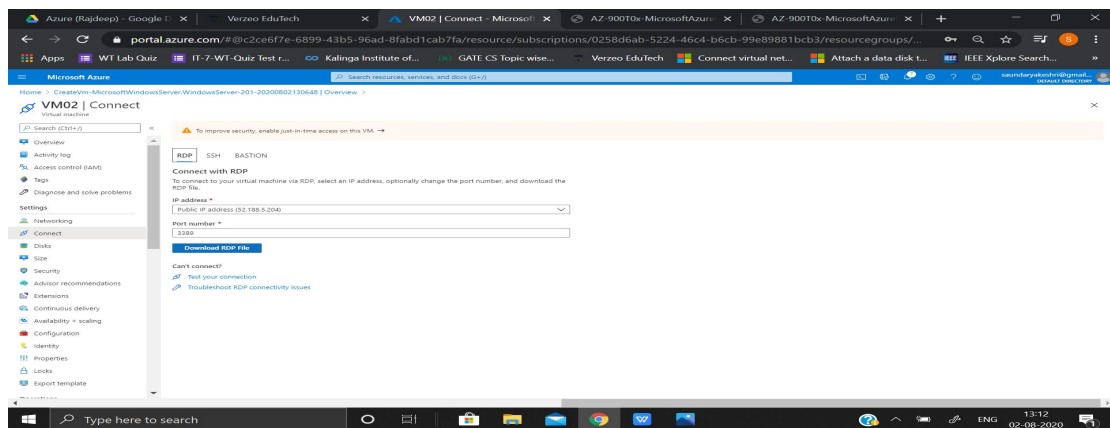
4. Click on the downloaded RDP file and click on **Connect**.
5. Enter the Username and Password specified earlier while creating **VM02.**
6. **Select Yes** and proceed. We now enter to our created virtual Machine**(VM02)**
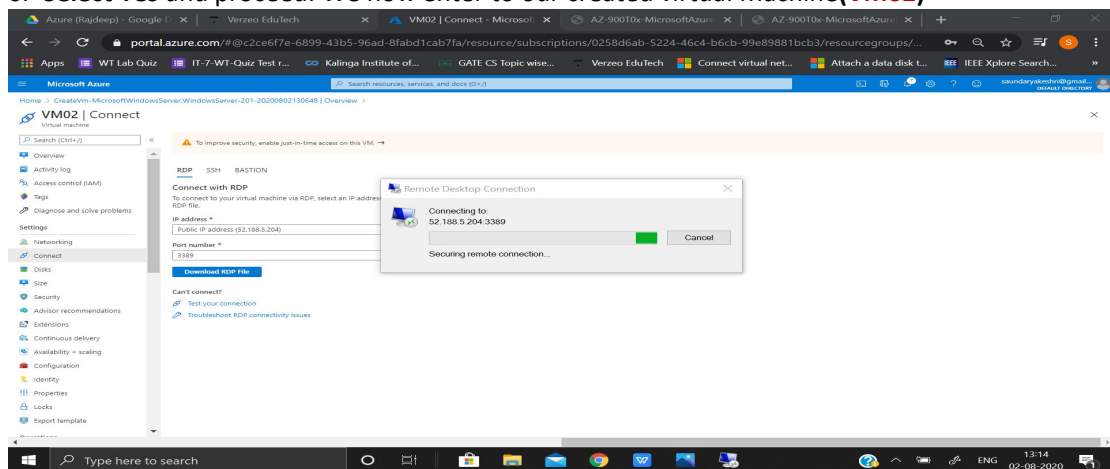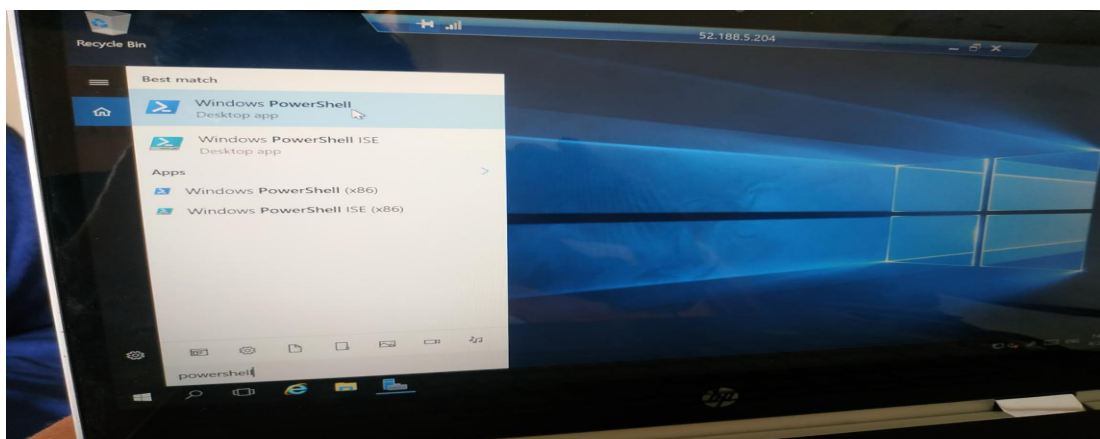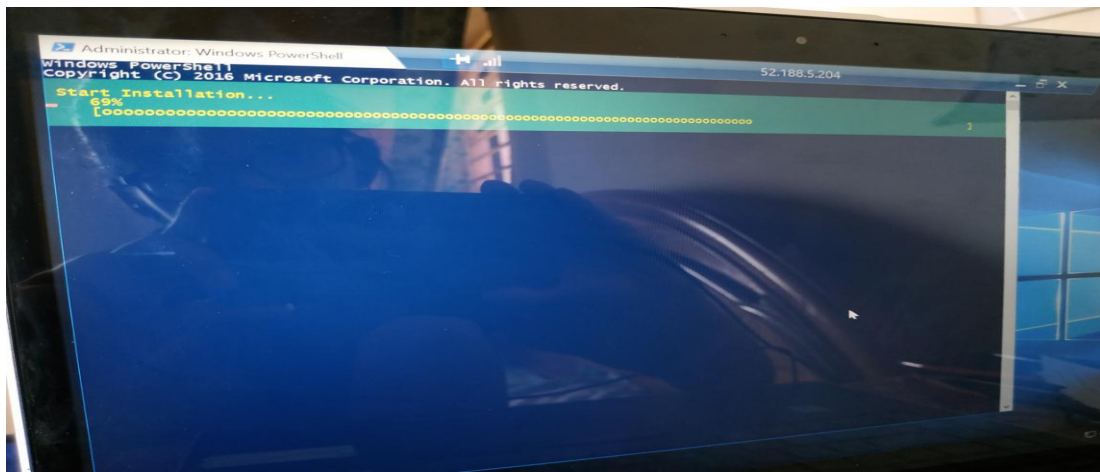
Virtual Machine VM02

-Install the web server role and test

1. Open up a PowerShell command prompt on the virtual machine, by clicking the **Start** button, typing **PowerShell**, right clicking **Windows PowerShell**

2. Install the **Web-Server** feature in the virtual machine by running the following command in the PowerShell command prompt - `Install-WindowsFeature -name Web-Server -IncludeManagementTools`

3. In the **browser** of your Virtual Machine (**VM02**) type **localhost**