1. Log in to the Azure Portal:

o Go to the <u>Azure Portal</u> and sign in with your account.

2. Create a New Virtual Machine Scale Set:

o Click on "Create a resource" from the left-hand menu.

3. Configure the Basics:

- o **Subscription**: Choose your subscription.
- **Resource Group**: Either create a new resource group or select an existing one
- o **Scale Set Name**: Provide a name for your scale set.
- o **Region**: Select your desired region (e.g., West US).
- o **Availability Zone**: Choose whether to use availability zones or not.
- o **Image**: Select **"Ubuntu"** from the list of available images (choose the specific version you need, e.g., Ubuntu 20.04 LTS).
- o **Instance Count**: Set the **Initial Instance Count** to **1**.

4. Configure Scaling Options:

- o Go to the "Scaling" tab.
- o **Minimum number of VMs**: Set this to **1**.
- o **Maximum number of VMs**: Set this to **5**.

Initial instance count * ①
1
Instance limit
Minimum * ①
1
The minimum count of instances this condition will scale down to is 1.
Maximum * (i)

The maximum count of instances this condition will scale up to is 5.

Step 2: Configure Autoscale Settings

1. Set Autoscale Rules:

- o In the scaling section, you will define scaling rules based on CPU utilization.
- Set the scale-out rule to trigger when the CPU percentage exceeds 75%.

• **Condition**: CPU Percentage > 75%

Action: Increase by 1 VM

Scale out	
CPU threshold greater than * ①	
75	
Every time the average CPU usage is greater than 75%.	
Increase instance count by * (i)	
1	7
The condition will increase the instance count by 1 instance	S

 Set the scale-in rule to trigger when the CPU percentage drops below 25%.

• **Condition**: CPU Percentage < 25%

Action: Decrease by 1 VM

Scale in

CPU threshold less than * (i)

25

Every time the average CPU usage is less than 25%.

Decrease instance count by * (i)

1

The condition will decrease the instance count by 1 instances

o Cooldown period: (set a cooldown period as per your needs, e.g., 5 minutes)



Step 3: Configure Networking and Review

1. Networking Settings:

- Click on "Next: Networking" to configure network settings.
- o Choose a new or existing virtual network and subnet.

2. Review + Create:

- Review all configurations.
- o Click "Create" to provision the VM scale set. This may take a few minutes.

Create a virtual machine scale set

