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Assignment -2

Q3. Create windows virtual machine using command line interface?

A: Output screens:

```
Requesting a Cloud Shell.Succeeded.
Connecting terminal...

Your Cloud Shell session will be ephemeral so no files or system change
shanmukhi [ ~ ]$ az account list
[
  {
    "cloudName": "AzureCloud",
    "homeTenantId": "caf21ffb-5993-4eed-a2ad-43b158bb14c7",
    "id": "eeb4ac4d-15ea-4514-b2fe-436f3e9e24c5",
    "isDefault": true,
    "managedByTenants": [],
    "name": "Azure Pass - Sponsorship",
    "state": "Enabled",
    "tenantId": "caf21ffb-5993-4eed-a2ad-43b158bb14c7",
    "user": {
      "cloudShellID": true,
      "name": "live.com#shanmukhi_micron@outlook.com",
      "type": "user"
    }
  }
]
```

```
anmukhi [ ~ ]$ az group create --name training --location centralindia

"id": "/subscriptions/eeb4ac4d-15ea-4514-b2fe-436f3e9e24c5/resourceGroups/training",
"location": "centralindia",
"managedBy": null,
"name": "training",
"properties": {
  "provisioningState": "Succeeded"
},
"tags": null,
"type": "Microsoft.Resources/resourceGroups"
```

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```
hanmukhi [ ~ ]$ az network vnet create --resource-group training --name training --subnet-name trainingsubnet

"newVNet": {
  "addressSpace": {
    "addressPrefixes": [
      "10.0.0.0/16"
    ]
  },
  "enableDdosProtection": false,
  "etag": "W/\"1b7e0301-0cbc-49be-ad41-df0210efd2f2\"",
  "id": "/subscriptions/eeb4ac4d-15ea-4514-b2fe-436f3e9e24c5/resourceGroups/training/providers/Microsoft.Netw
tualNetworks/training",
  "location": "centralindia",
  "name": "training",
  "provisioningState": "Succeeded",
  "resourceGroup": "training",
  "resourceGuid": "a8940107-7ba6-4b1e-88df-4742a574d686",
  "subnets": [
    {
      "addressPrefix": "10.0.0.0/24",
      "delegations": [],
      "etag": "W/\"1b7e0301-0cbc-49be-ad41-df0210efd2f2\"",
```

```
hanmukhi [ ~ ]$ az network public-ip create --resource-group training --name trainingpublicip
[Coming breaking change] In the coming release, the default behavior will be changed as follows when sku
and zone is not provided: For zonal regions, you will get a zone-redundant IP indicated by zones:["1","2"
on-zonal regions, you will get a non zone-redundant IP indicated by zones:null.
{
  "publicIp": {
    "ddosSettings": {
      "protectionMode": "VirtualNetworkInherited"
    },
    "etag": "W/\"e191c8ab-63c5-426f-af1a-ccf821dab94f\"",
    "id": "/subscriptions/eeb4ac4d-15ea-4514-b2fe-436f3e9e24c5/resourceGroups/training/providers/Microsof
blicIPAddresses/trainingpublicip",
    "idleTimeoutInMinutes": 4,
    "ipAddress": "74.225.195.77",
    "ipTags": [],
    "location": "centralindia",
    "name": "trainingpublicip",
    "provisioningState": "Succeeded",
    "publicIPAddressVersion": "IPv4",
    "publicIPAllocationMethod": "Static",
    "resourceGroup": "training",
    "resourceGuid": "80fc047a-45cb-463e-b332-64d23160a019",
```

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```
shanmukhi [ ~ ]$ az network nsg create --resource-group training --name trainingsecuritygroup
{
  "NewNSG": {
    "defaultSecurityRules": [
      {
        "access": "Allow",
        "description": "Allow inbound traffic from all VMs in VNET",
        "destinationAddressPrefix": "VirtualNetwork",
        "destinationAddressPrefixes": [],
        "destinationPortRange": "*",
        "destinationPortRanges": [],
        "direction": "Inbound",
        "etag": "W/\"3a3aae82-f66c-48ad-87dc-50cc2c0481d3\"",
        "id": "/subscriptions/eeb4ac4d-15ea-4514-b2fe-436f3e9e24c5/resourceGroups/training/providers/Microsoft.Networ
k/networkSecurityGroups/trainingsecuritygroup/defaultSecurityRules/AllowVnetInBound",
        "name": "AllowVnetInBound",
        "priority": 65000,
        "protocol": "*",
        "provisioningState": "Succeeded",
```

```
shanmukhi [ ~ ]$ az network nic create --resource-group training --name trainingnic --vnet-name training --subnet tra
iningsubnet --network-security-group trainingsecuritygroup --public-ip-address trainingpublicip
{
  "NewNIC": {
    "auxiliaryMode": "None",
    "auxiliarySku": "None",
    "disableTcpStateTracking": false,
    "dnsSettings": {
      "appliedDnsServers": [],
      "dnsServers": [],
      "internalDomainNameSuffix": "a2azjkfgpmpexcg5i3bkk3gwqg.rx.internal.cloudapp.net"
    },
    "enableAcceleratedNetworking": false,
    "enableIPForwarding": false,
    "etag": "W/\"ea2dd082-cc58-41b0-8308-e44c724e6ab9\"",
    "hostedWorkloads": [],
    "id": "/subscriptions/eeb4ac4d-15ea-4514-b2fe-436f3e9e24c5/resourceGroups/training/providers/Microsoft.Network/ne
tworkInterfaces/trainingnic"
```

```
shanmukhi [ ~ ]$ az vm create --resource-group training --name trainingvm --nics trainingnic --image Win2022Datacent
r --size Standard_D2s_v3 --admin-username shanmukhi
Admin Password:
Confirm Admin Password:
{
  "fqdns": "",
  "id": "/subscriptions/eeb4ac4d-15ea-4514-b2fe-436f3e9e24c5/resourceGroups/training/providers/Microsoft.Compute/vir
tualMachines/trainingvm",
  "location": "centralindia",
  "macAddress": "60-45-BD-AA-A7-AB",
  "powerState": "VM running",
  "privateIpAddress": "10.0.0.4",
  "publicIpAddress": "74.225.195.77",
  "resourceGroup": "training",
  "zones": ""
}
```

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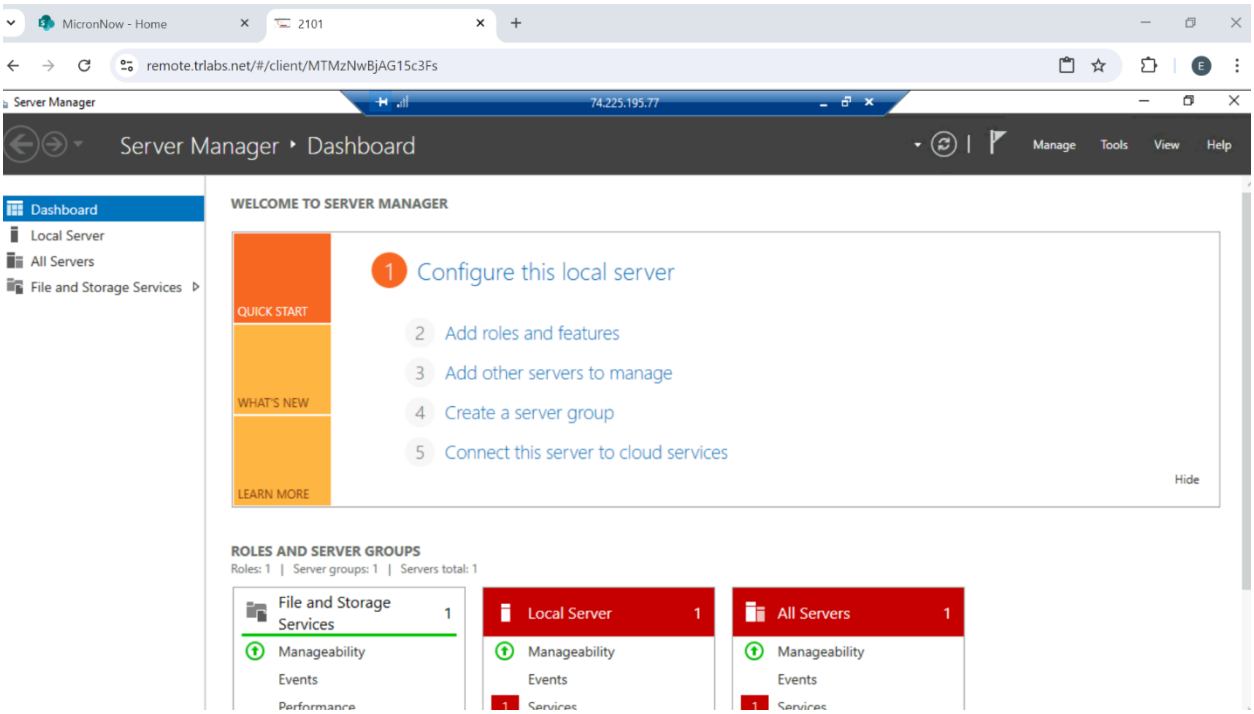
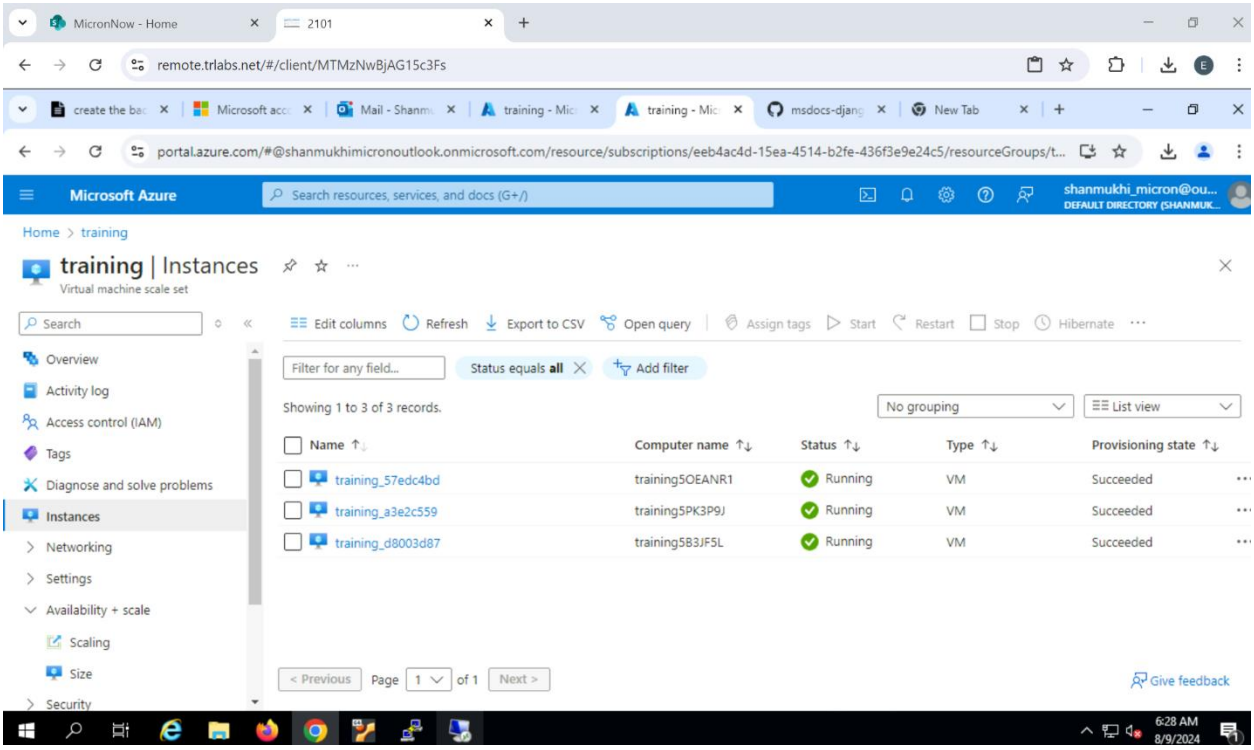
```
hanmukhi [ ~ ]$ az vm open-port --port 3389  --resource-group training --name trainingvm

 "defaultSecurityRules": [
   {
     "access": "Allow",
     "description": "Allow inbound traffic from all VMs in VNET",
     "destinationAddressPrefix": "VirtualNetwork",
     "destinationAddressPrefixes": [],
     "destinationPortRange": "*",
     "destinationPortRanges": [],
     "direction": "Inbound",
     "etag": "W/\"4b2f8069-5a6c-4452-a20b-24985070082c\"",
     "id": "/subscriptions/eeb4ac4d-15ea-4514-b2fe-436f3e9e24c5/resourceGroups/training/providers/
etworkSecurityGroups/trainingsecuritygroup/defaultSecurityRules/AllowVnetInBound",
     "name": "AllowVnetInBound",
     "priority": 65000,
     "protocol": "*",
     "provisioningState": "Succeeded",
     "resourceGroup": "training",
     "sourceAddressPrefix": "VirtualNetwork",
     "sourceAddressPrefixes": [],
     "sourcePortRange": "*",
```



Q4. Create a virtual machine scale-set for windows operating system if the average c.p.u utilization is greater than 50 it should scale up and scale down ?

A: output screens:



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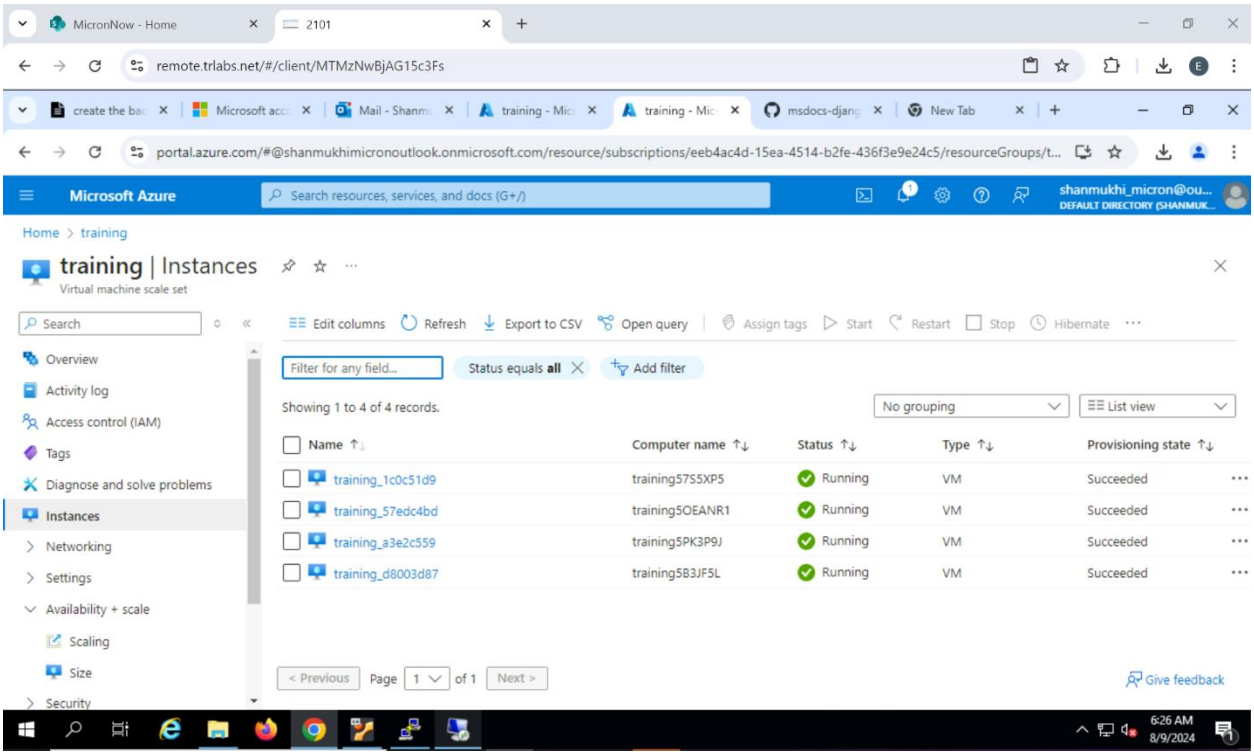

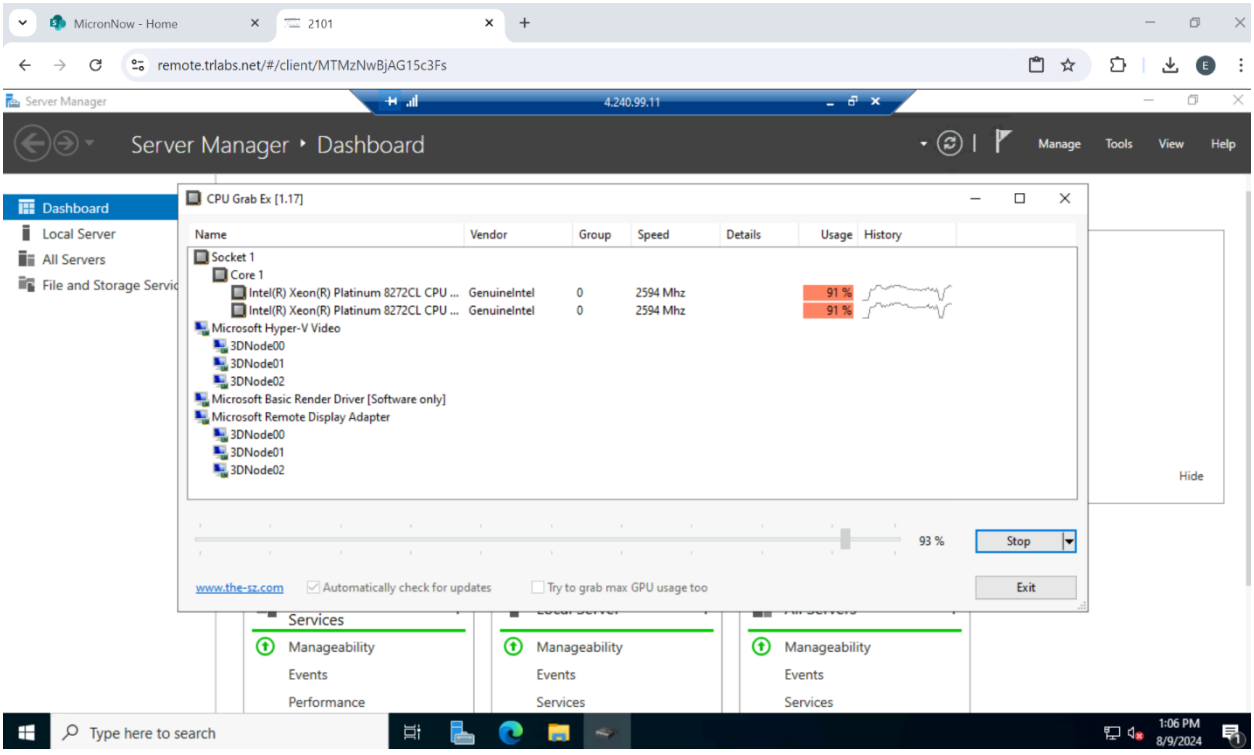

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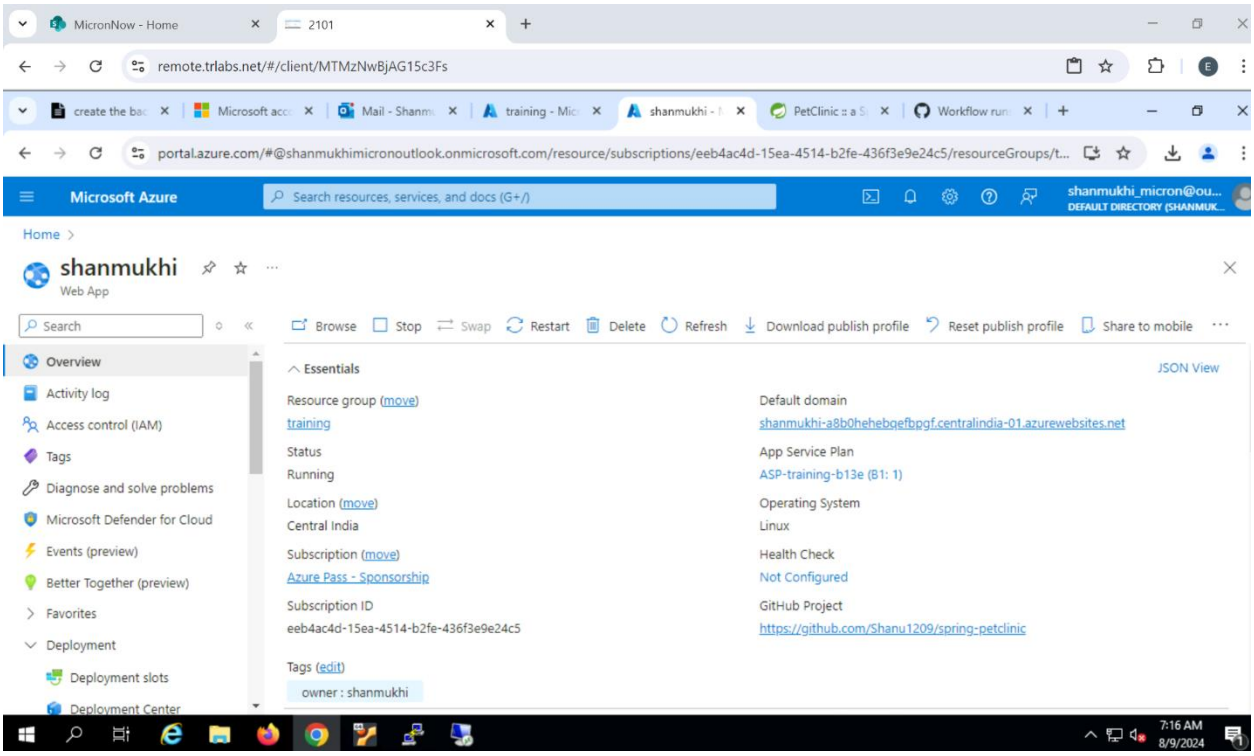
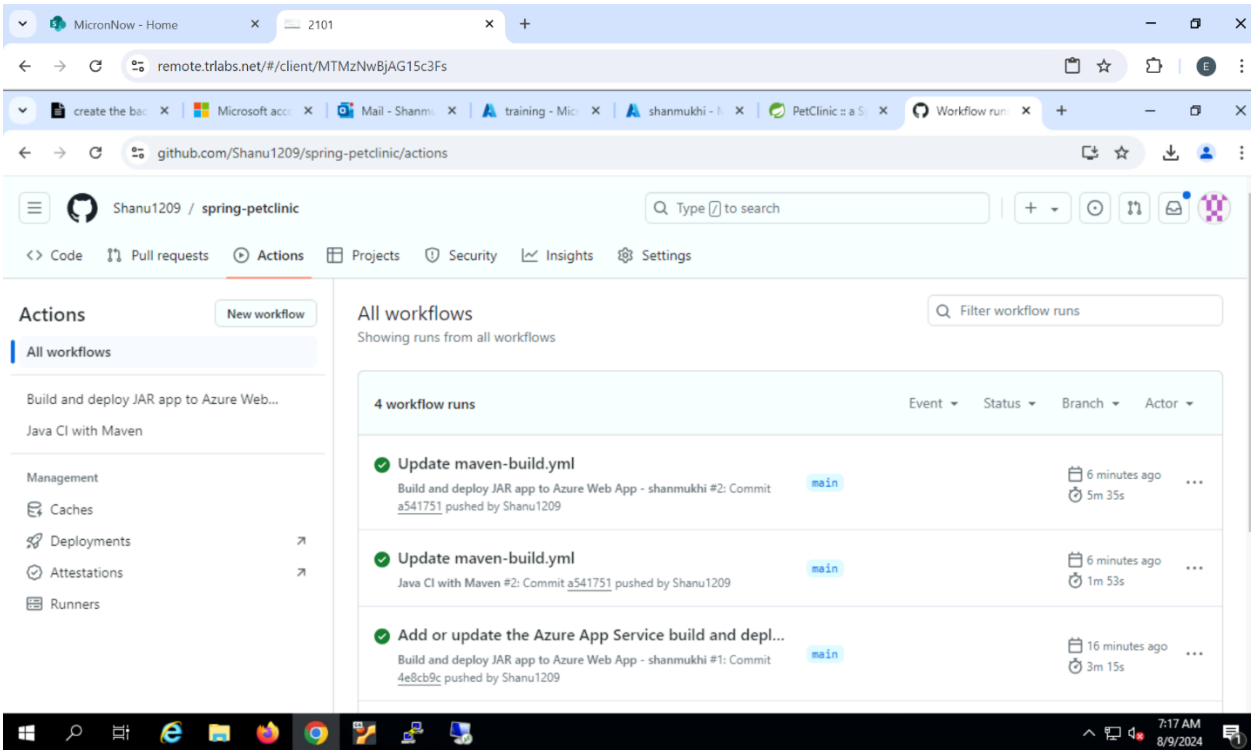
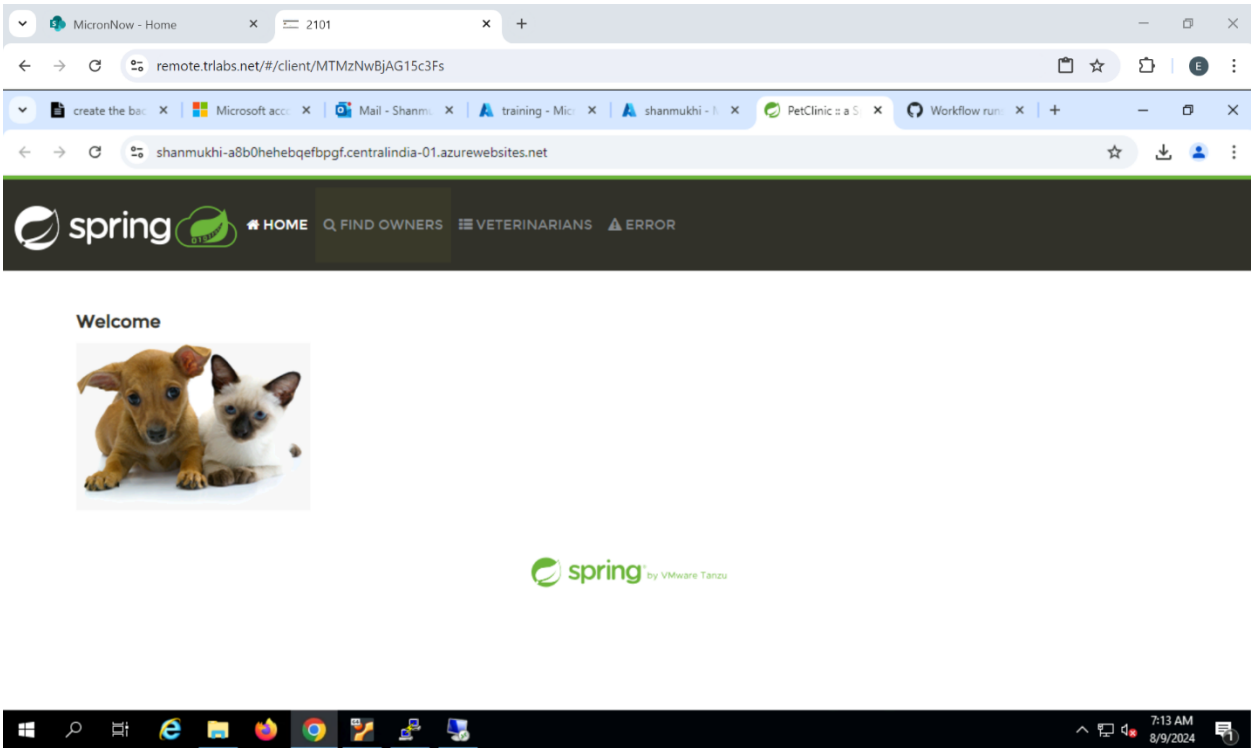
Q5. Deploy spring pet clinic on azure app service?

A: output screens:

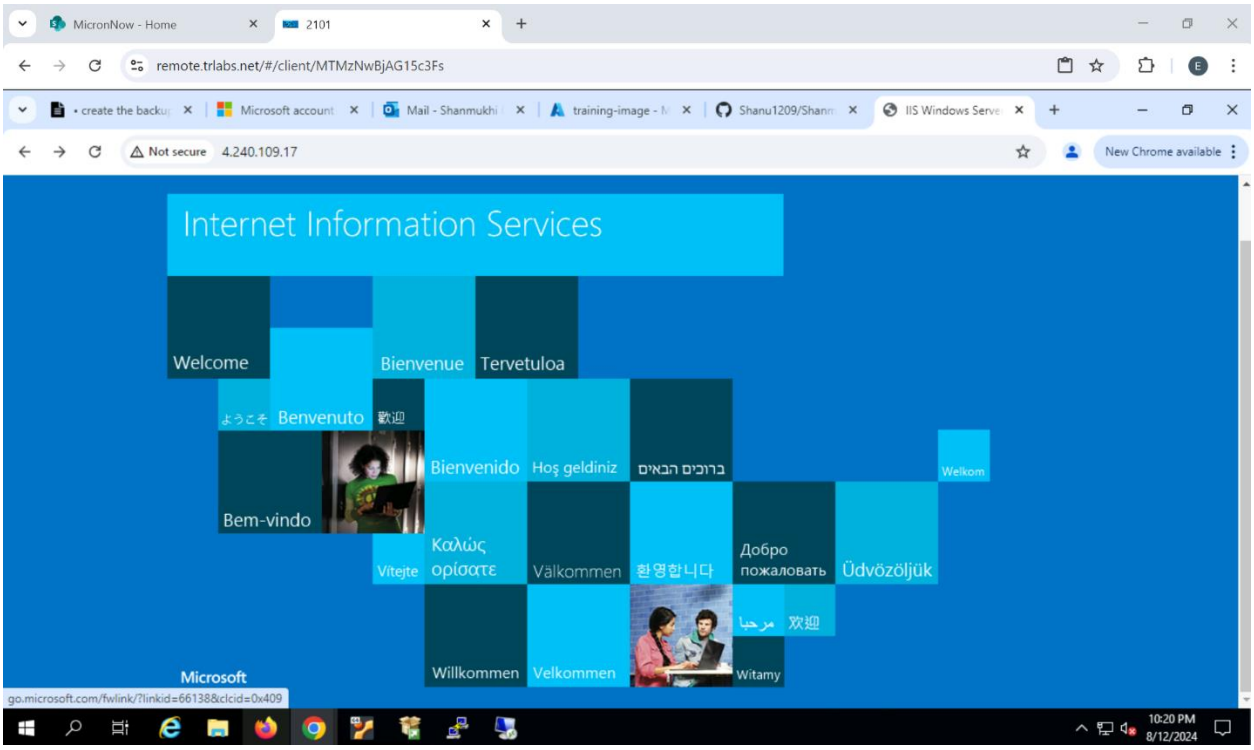


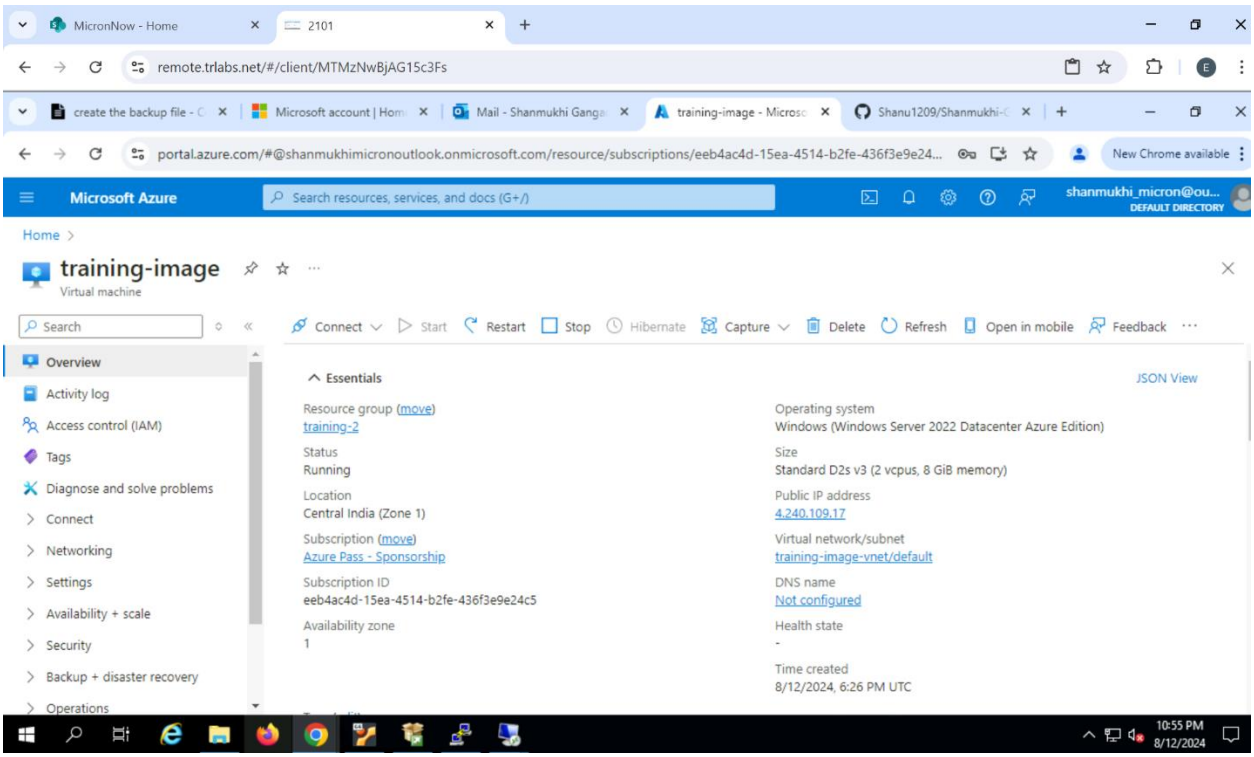




Q2. Create a windows image with IAS pre-installed?

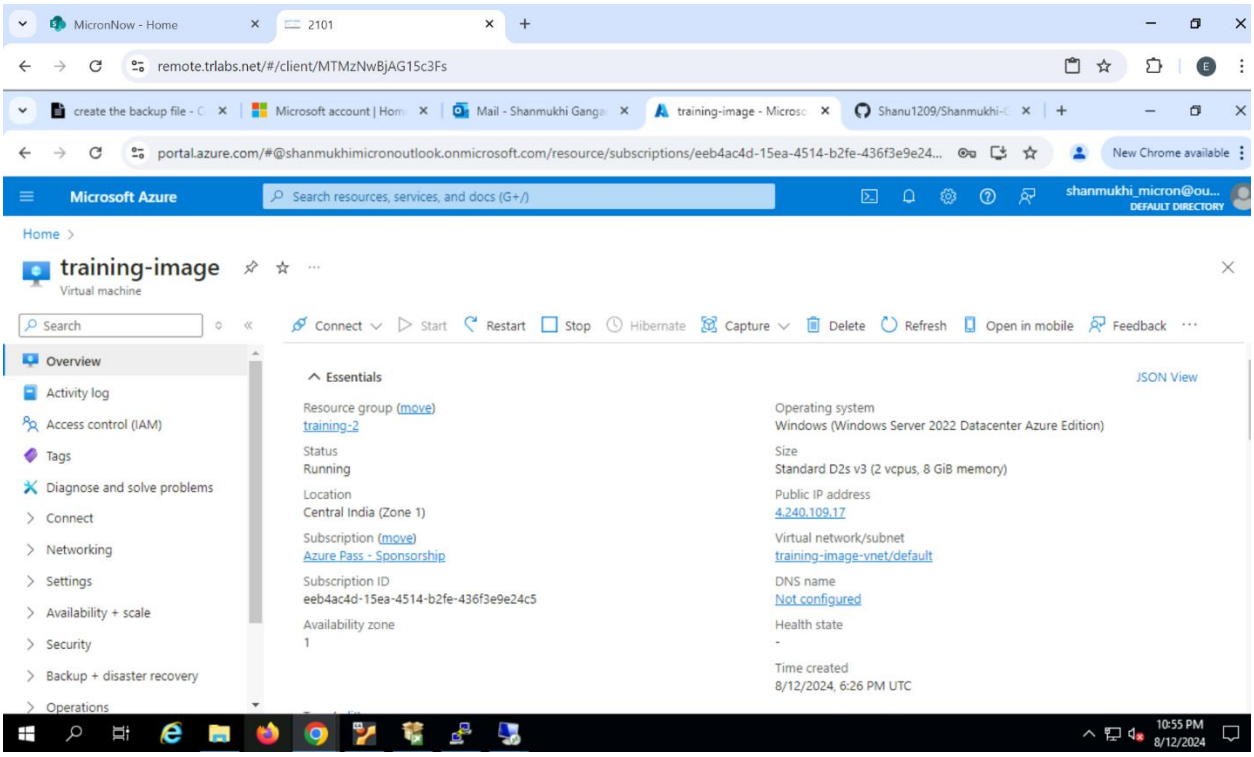
A: output screens:





Q1. Host a simple node.js application using custom data in linux?

A: output screens:



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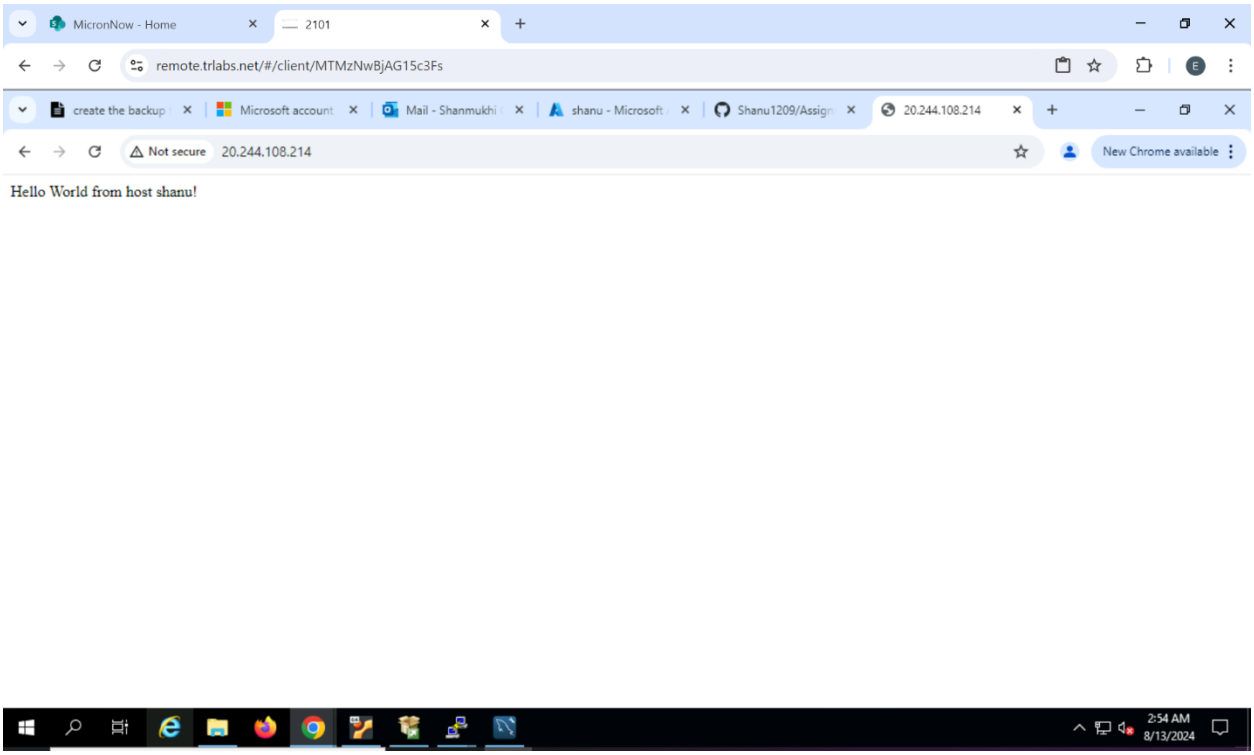

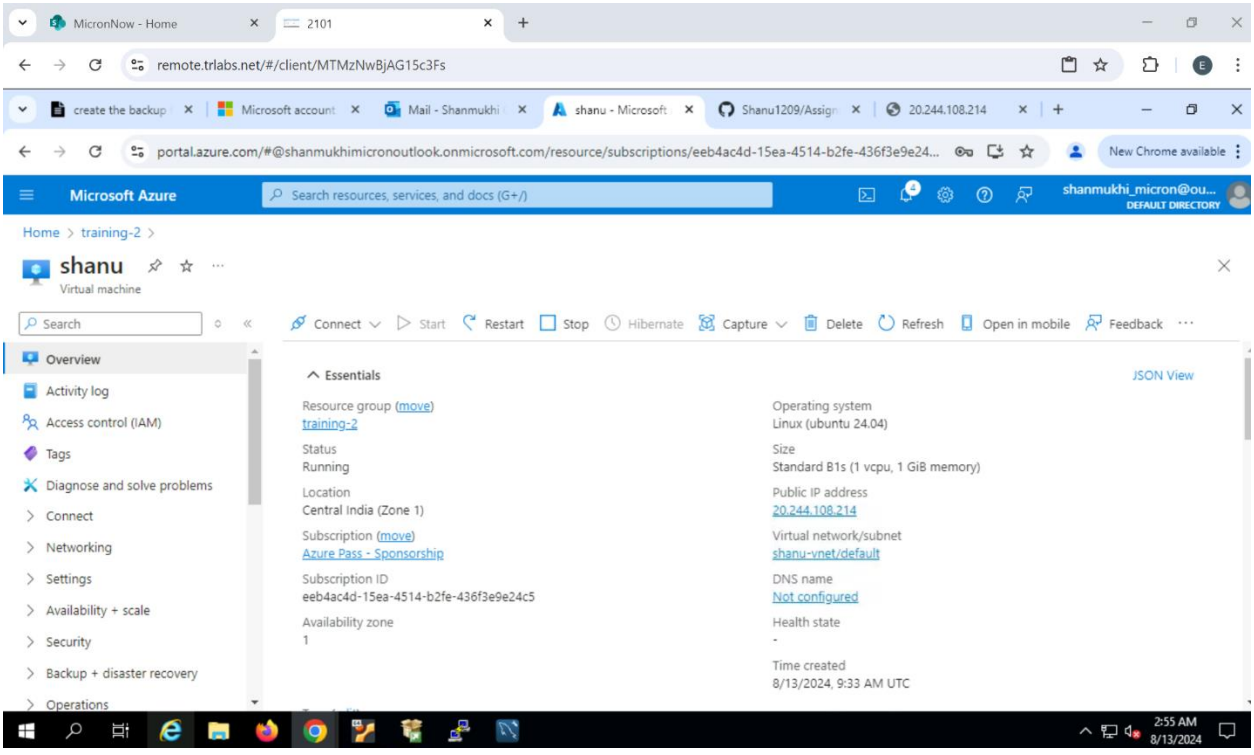

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