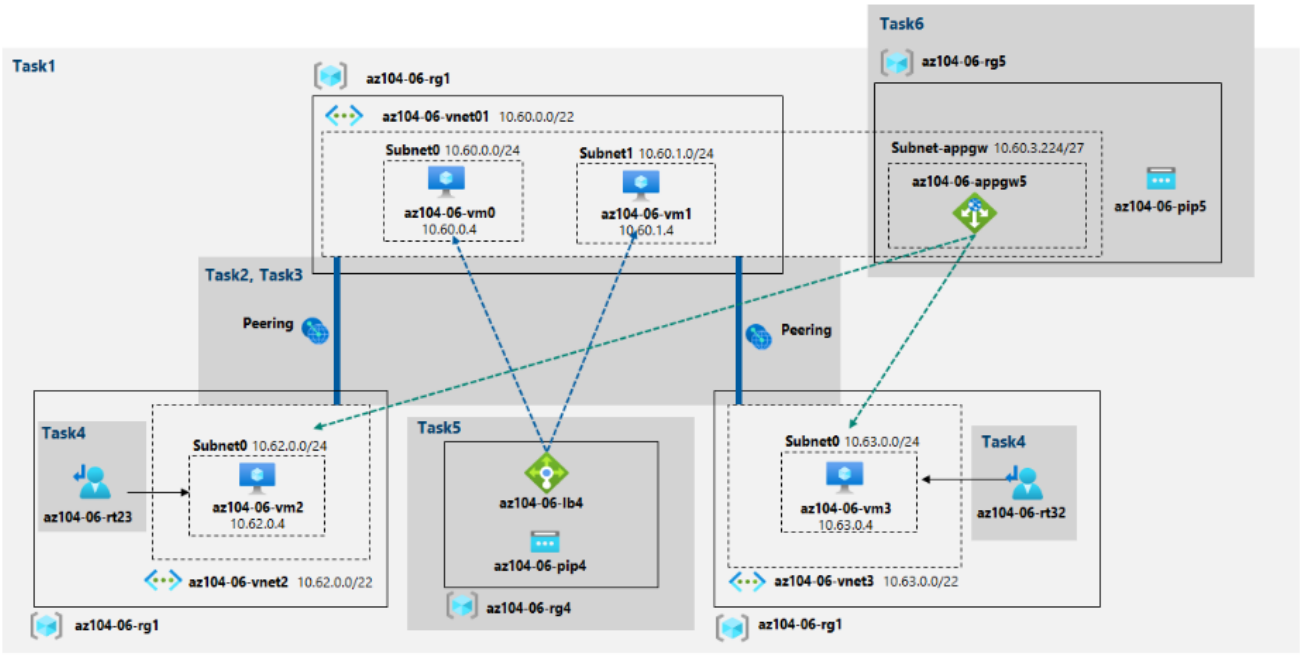
Implement Traffic Management Student

In this lab,

- Task 1: Provision the lab environment
- Task 2: Configure the hub and spoke network topology
- Task 3: Test transitivity of virtual network peering
- Task 4: Configure routing in the hub and spoke topology
- Task 5: Implement Azure Load Balancer
- Task 6: Implement Azure Application Gateway

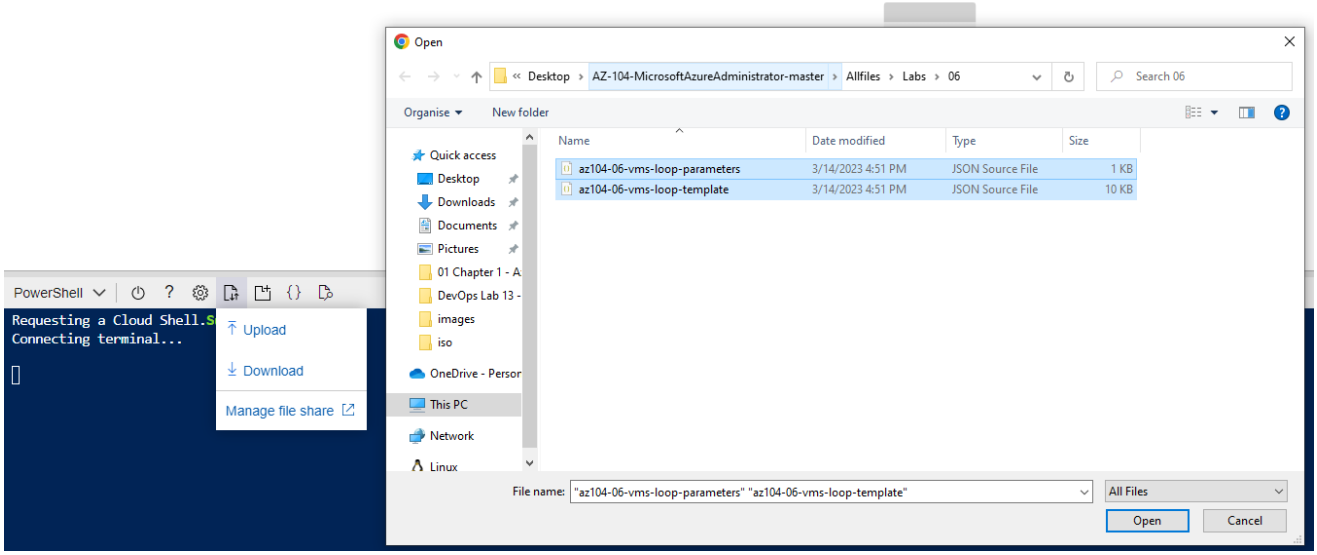


Task 1: Provision the lab environment

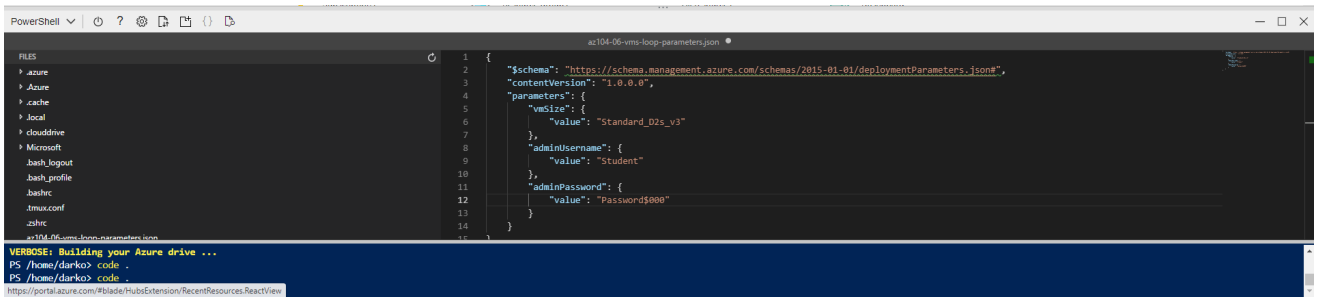
Login to portal.azure. Open powershell and upload two files

File 1: **\Allfiles\Labs\06\az104-06-vms-loop-template.json**

File 2: **\Allfiles\Labs\06\az104-06-vms-loop-template.json**



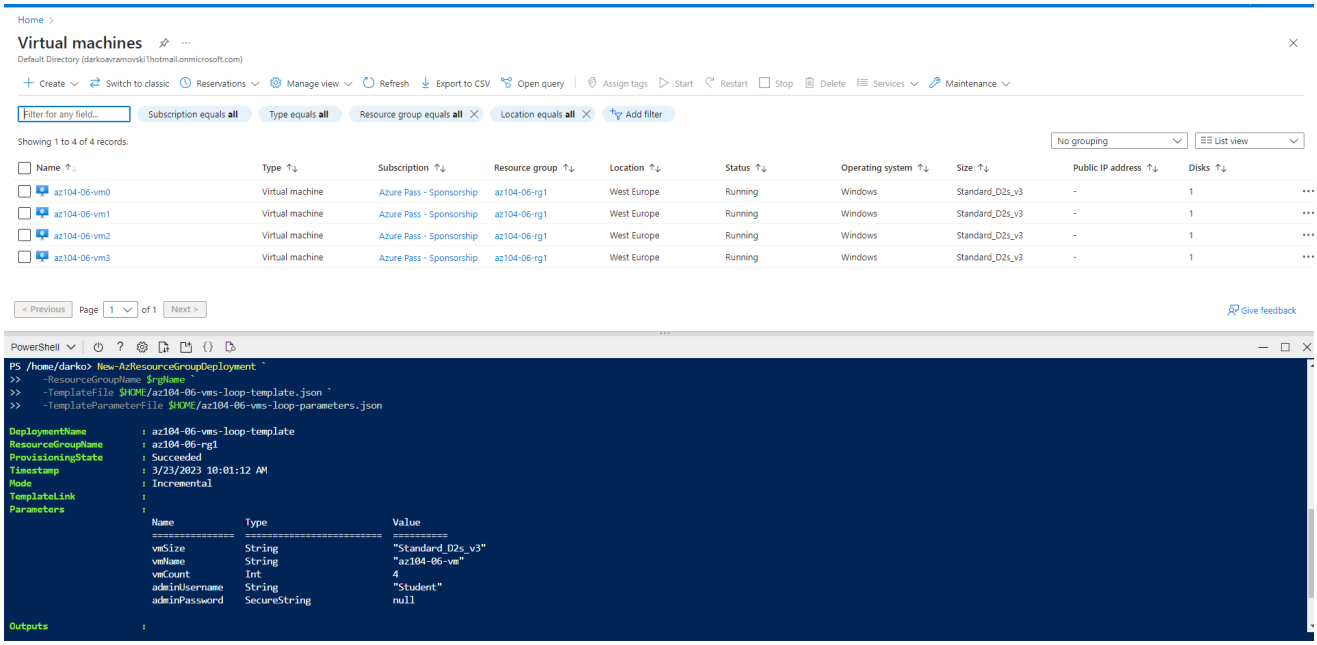
After we upload the scripts, we have to edit the login credentials.



From the powershell run this command to create three virtual networks and four Azure VMs from files we uploaded.

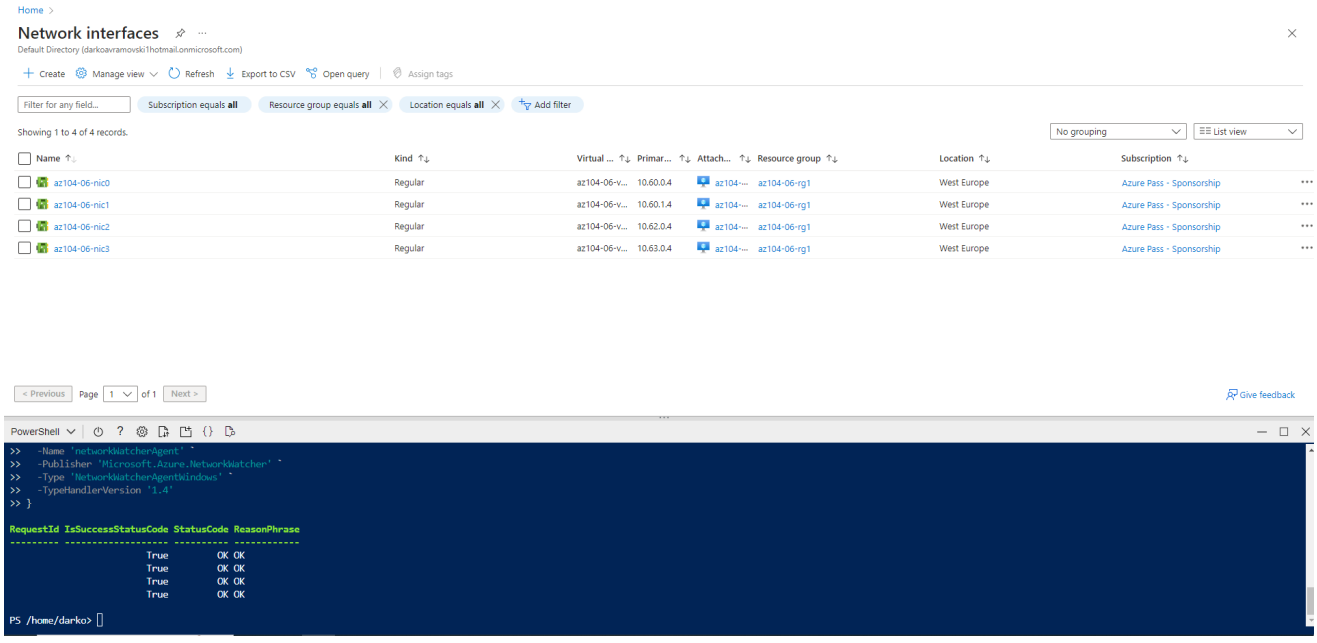
```
New-AzResourceGroupDeployment `
-ResourceGroupName $rgName `
-TemplateFile $HOME/az104-06-vms-loop-template.json `
-TemplateParameterFile $HOME/az104-06-vms-loop-parameters.json
```

Success!!! We created new VM



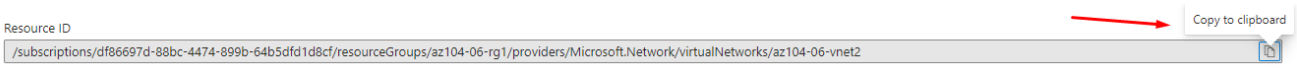
Now we have to create Network Watcher extension on the Azure, for the vm we created in previous step. Run this command in powershell

Success!!! We created new network watche for every VM

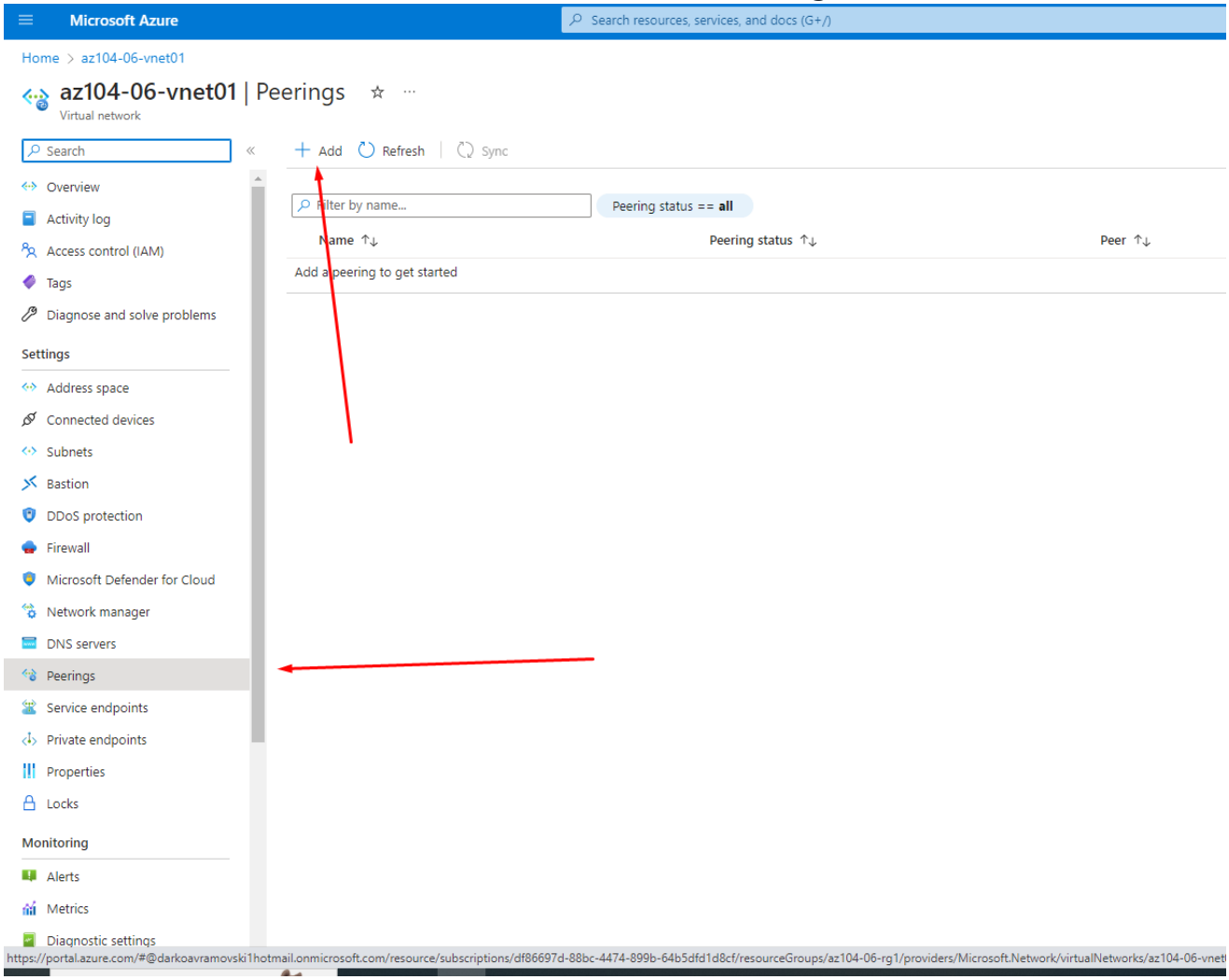


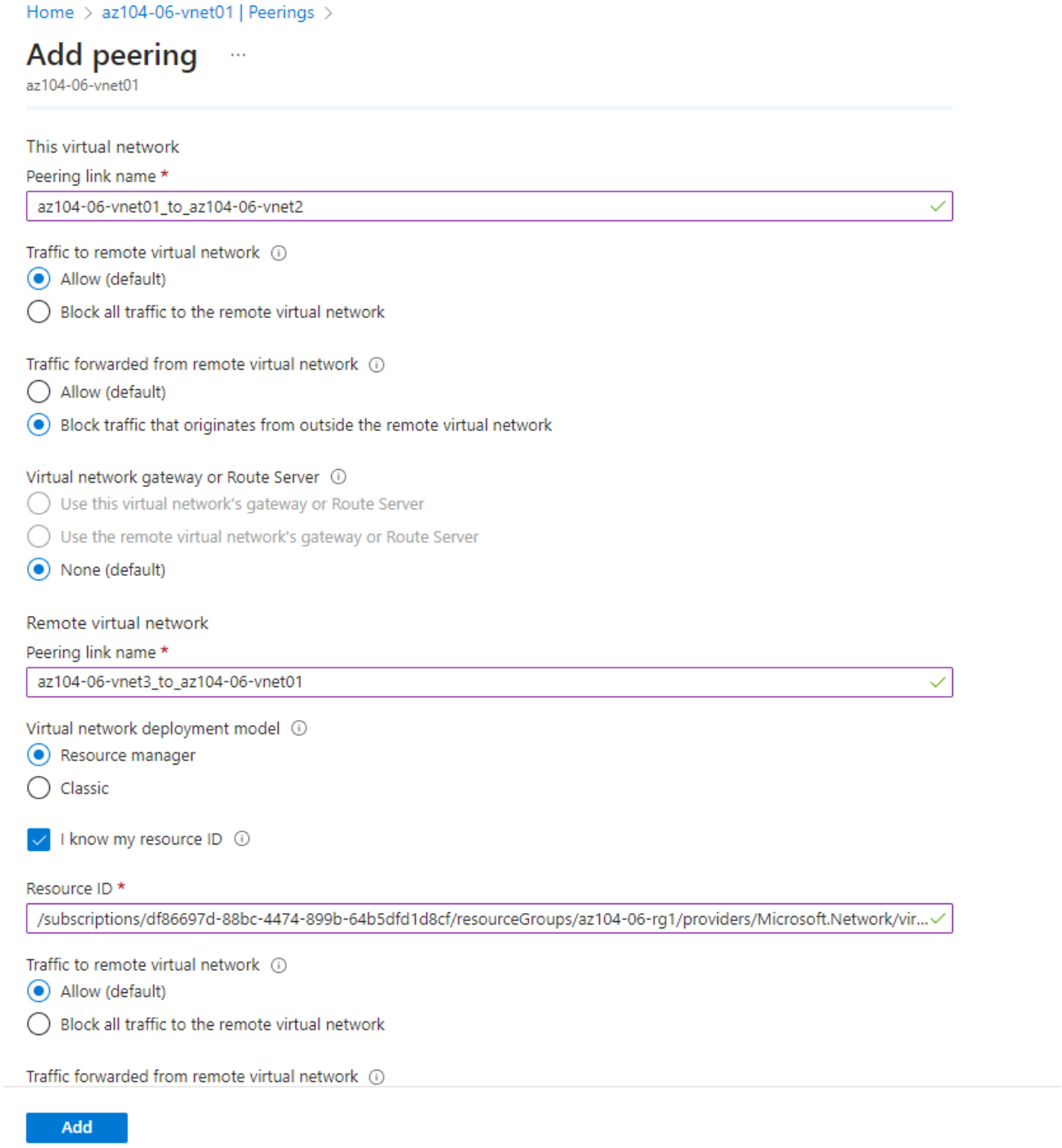
Task 2: Configure the hub and spoke network topology

From the search bar type Virtual networks. Select **az104-06-vnet2** / Properties from left side menu . and copy **Resource ID** also for **az104-06-vnet3**.



Select **az104-06-vnet01** and from left side menu select **Peerings** than click Add new

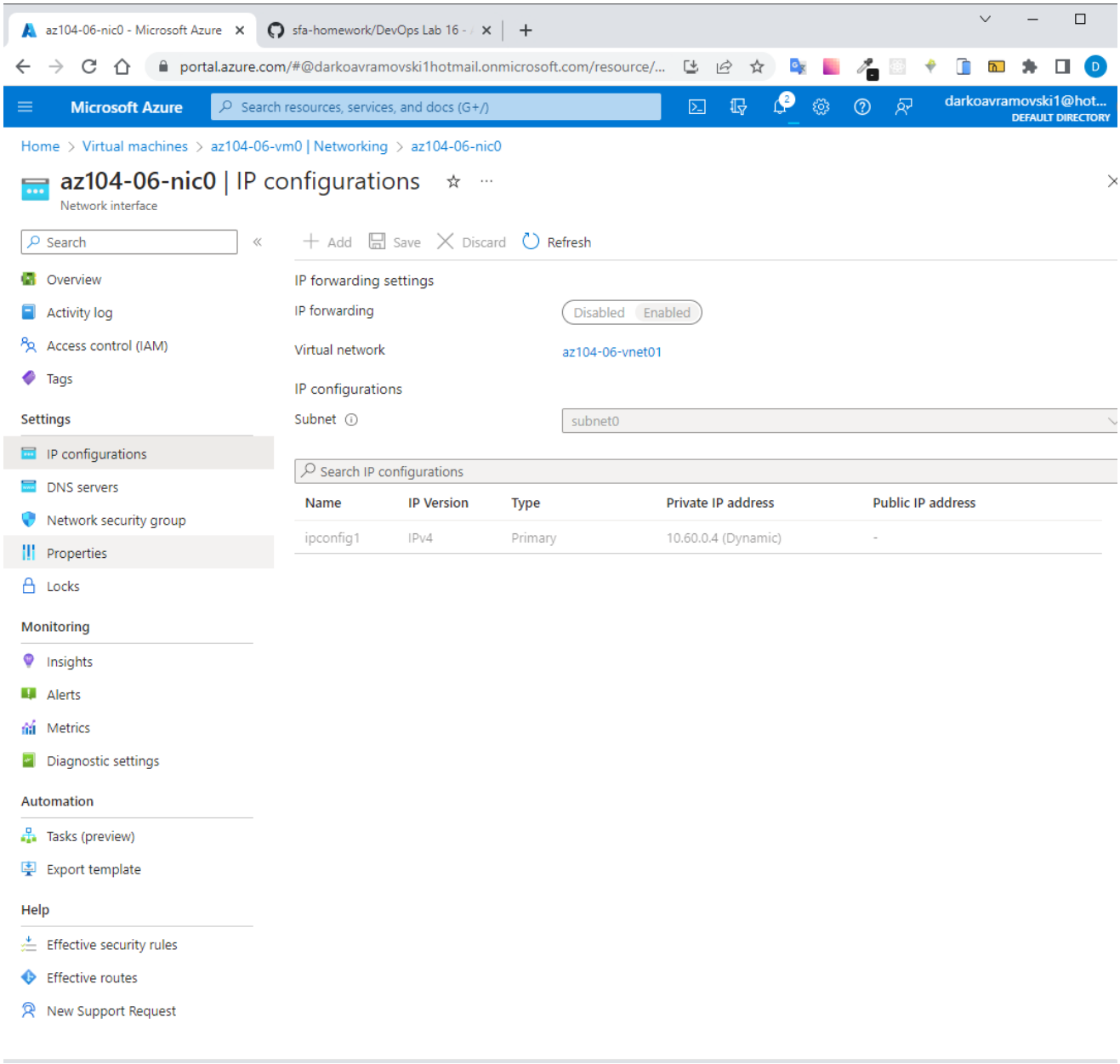




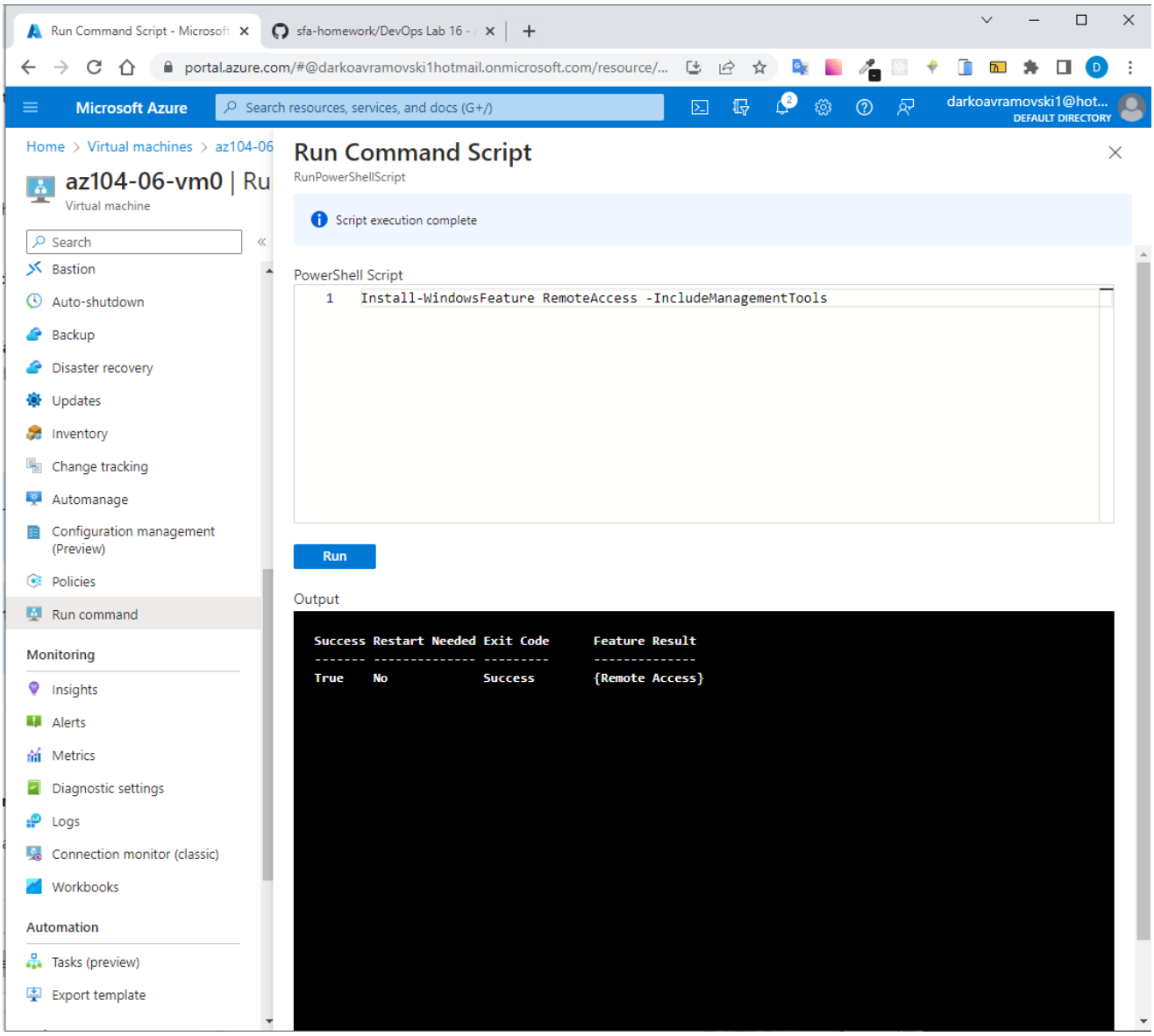
Repeat this proces for az104-06-vnet3

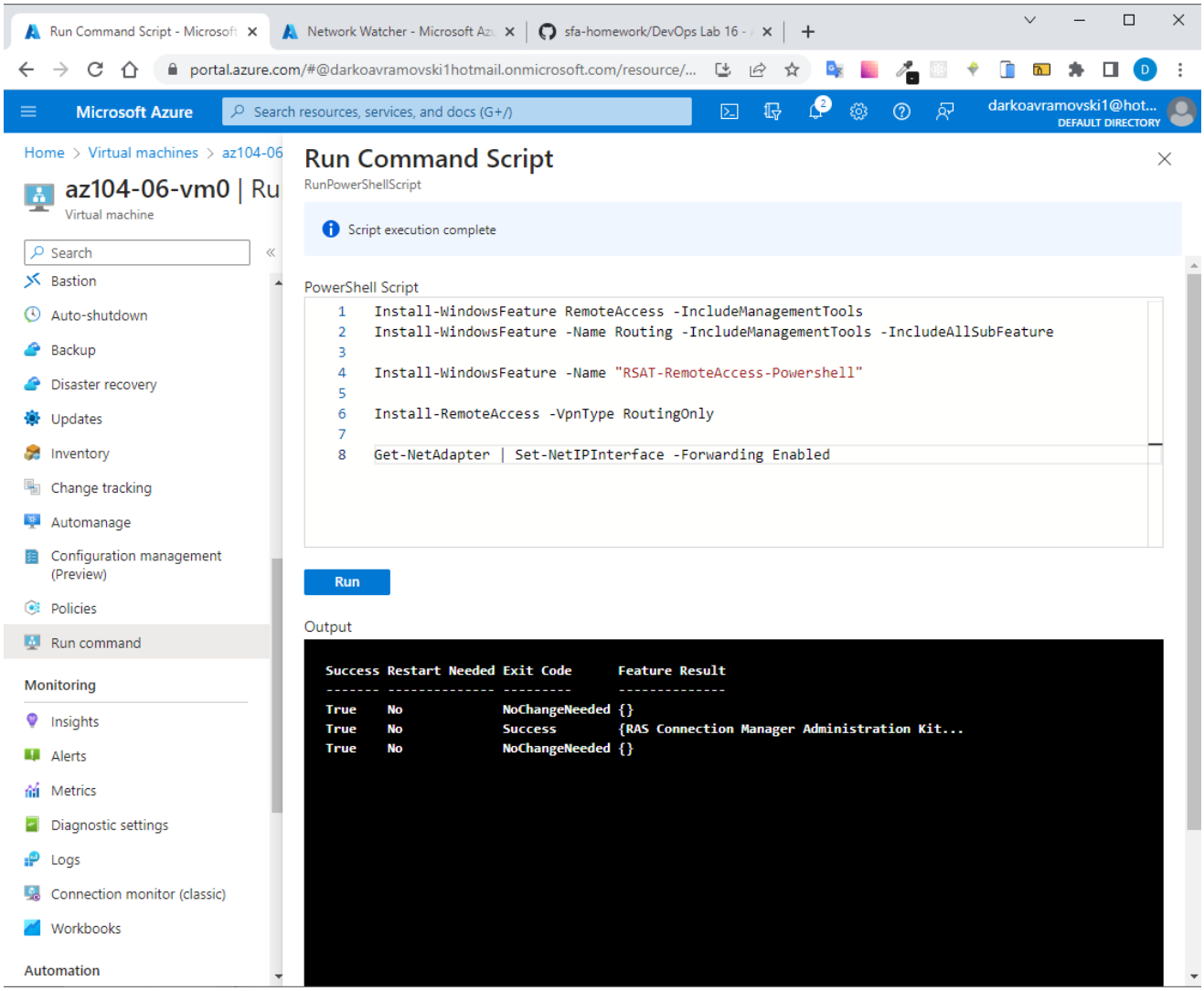
Task 4: Configure routing in the hub and spoke topology

We have to enable **IP forwading** on VM **az104-06-vm0** we have to go in Virtual Machines/az104-06-vm0/Network Interface: az104-06-nic0 enable **IP forwading** and click Save

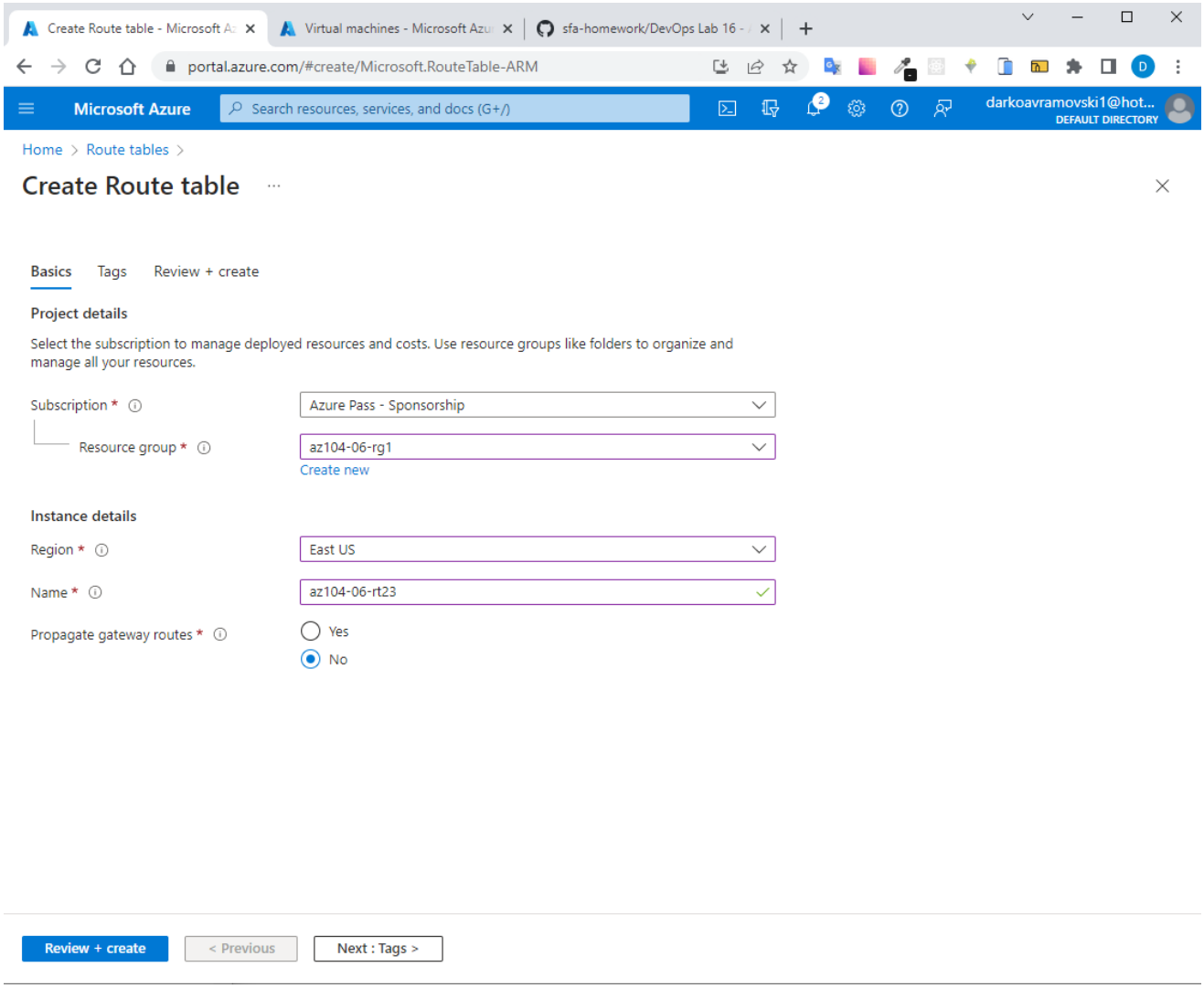


Navigate back to Virtual Machines and select **az104-06-vm0** and click **Overview** and **Run command** and select **RunPowerShellScript.**

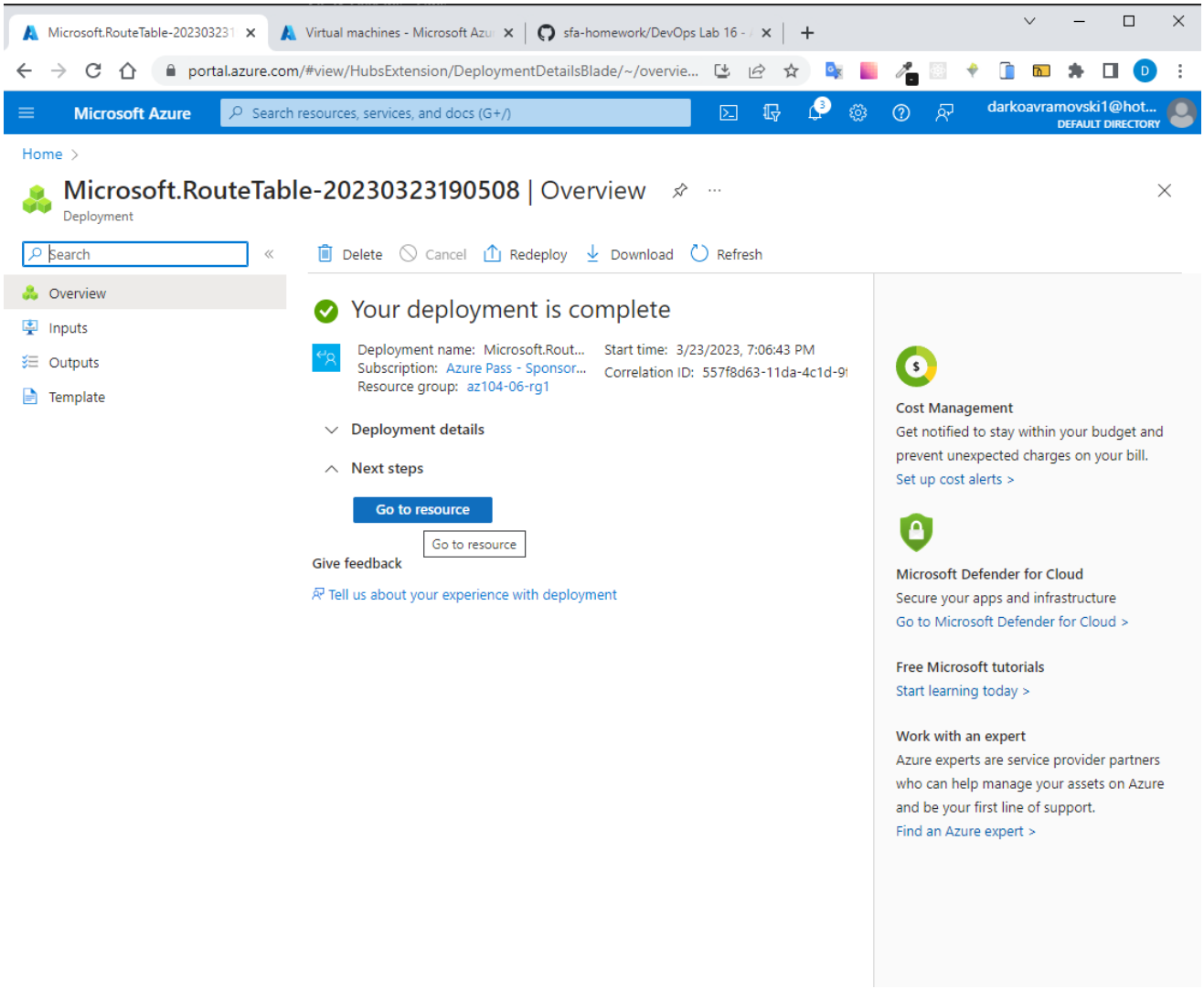

Run Command Script - Microsoft
sfa-homework/DevOps Lab 16 -
portal.azure.com/#@darkoavramovski1hotmail.onmicrosoft.com/resource/...
Microsoft Azure
Search resources, services, and docs (G+/)
darkoavramovski1@hot...
DEFAULT DIRECTORY
Home > Virtual machines > az104-06
az104-06-vm0 | Ru
Virtual machine
Search
Bastion
Auto-shutdown
Backup
Disaster recovery
Updates
Inventory
Change tracking
Automanage
Configuration management (Preview)
Policies
Run command
Monitoring
Insights
Alerts
Metrics
Diagnostic settings
Logs
Connection monitor (classic)
Workbooks
Automation
Tasks (preview)
Export template
Run Command Script
RunPowerShellScript
Script execution complete
PowerShell Script
1 Install-WindowsFeature RemoteAccess -IncludeManagementTools
Run
Output
Success Restart Needed Exit Code Feature Result
True No Success {Remote Access}



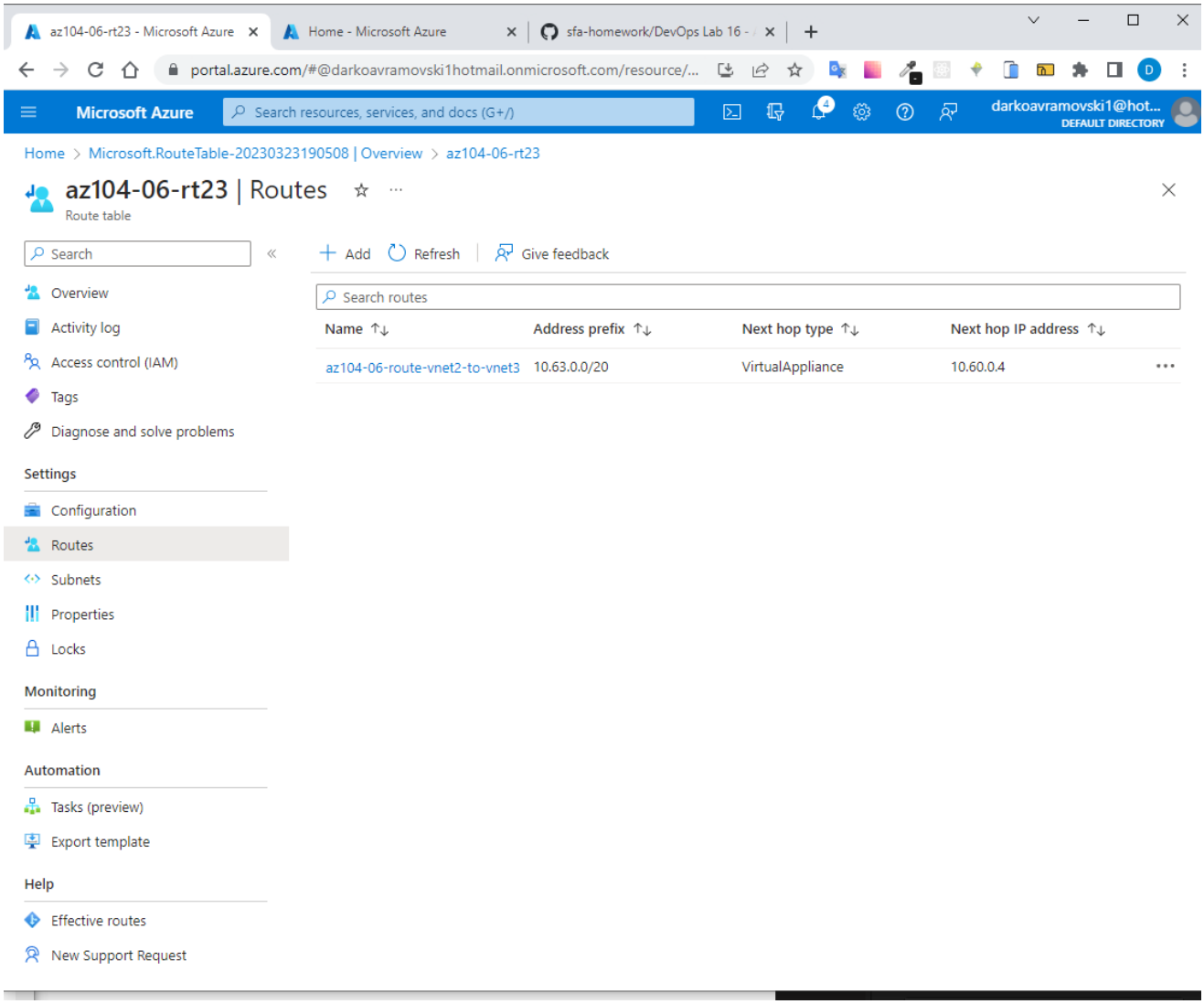
Now we have to create route tables



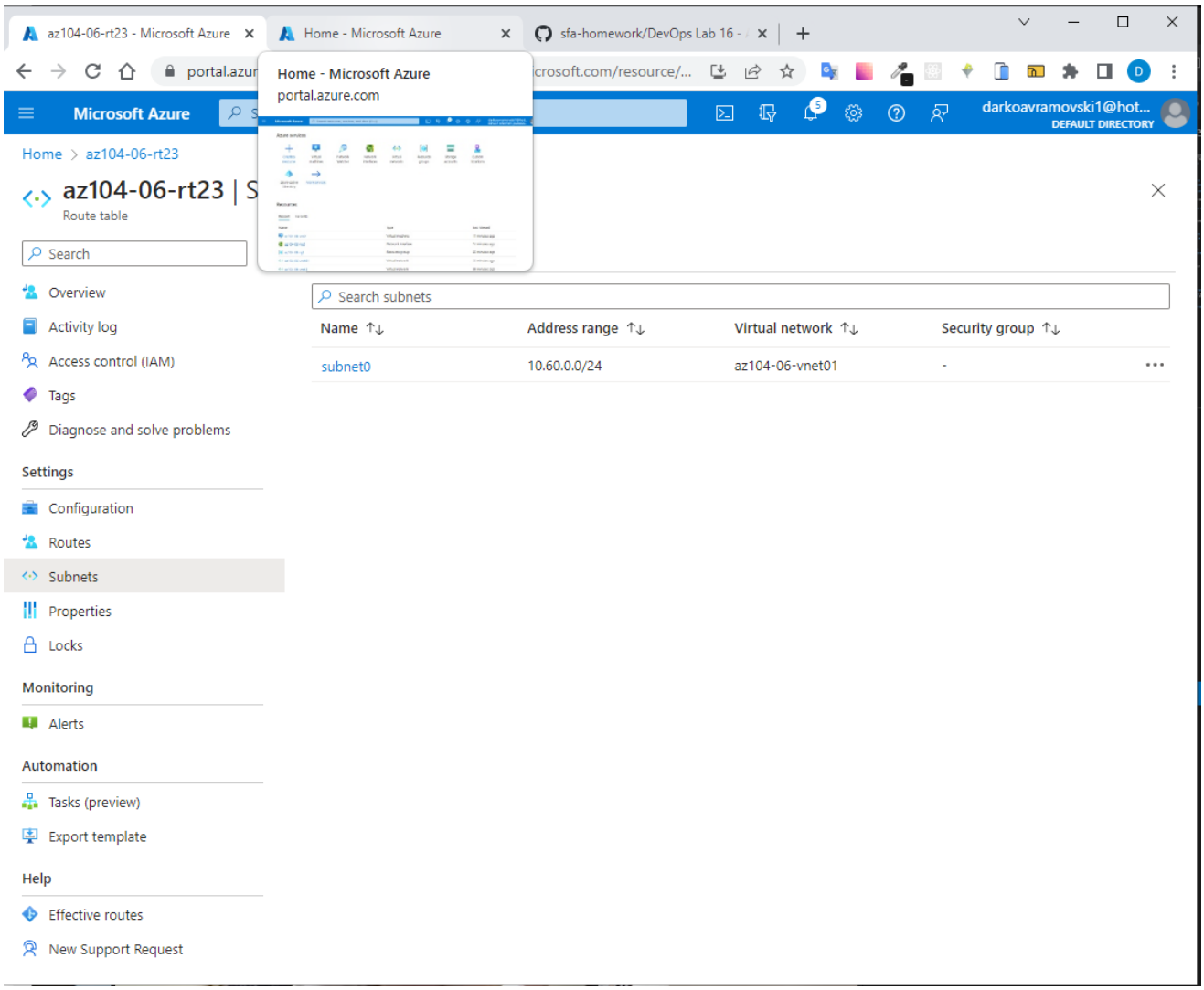
Click got to resources



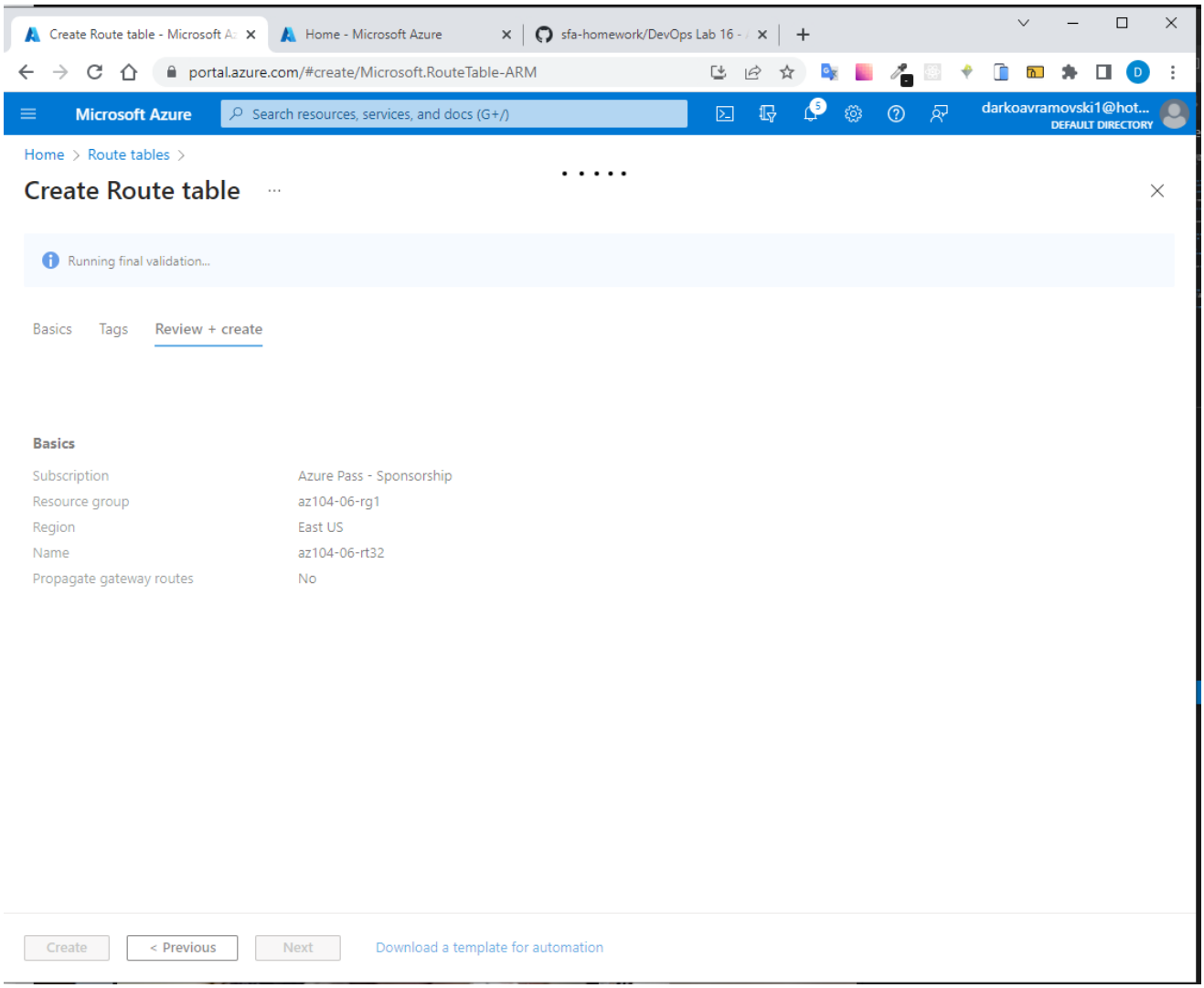
Now we have to add Routes



Create subnet

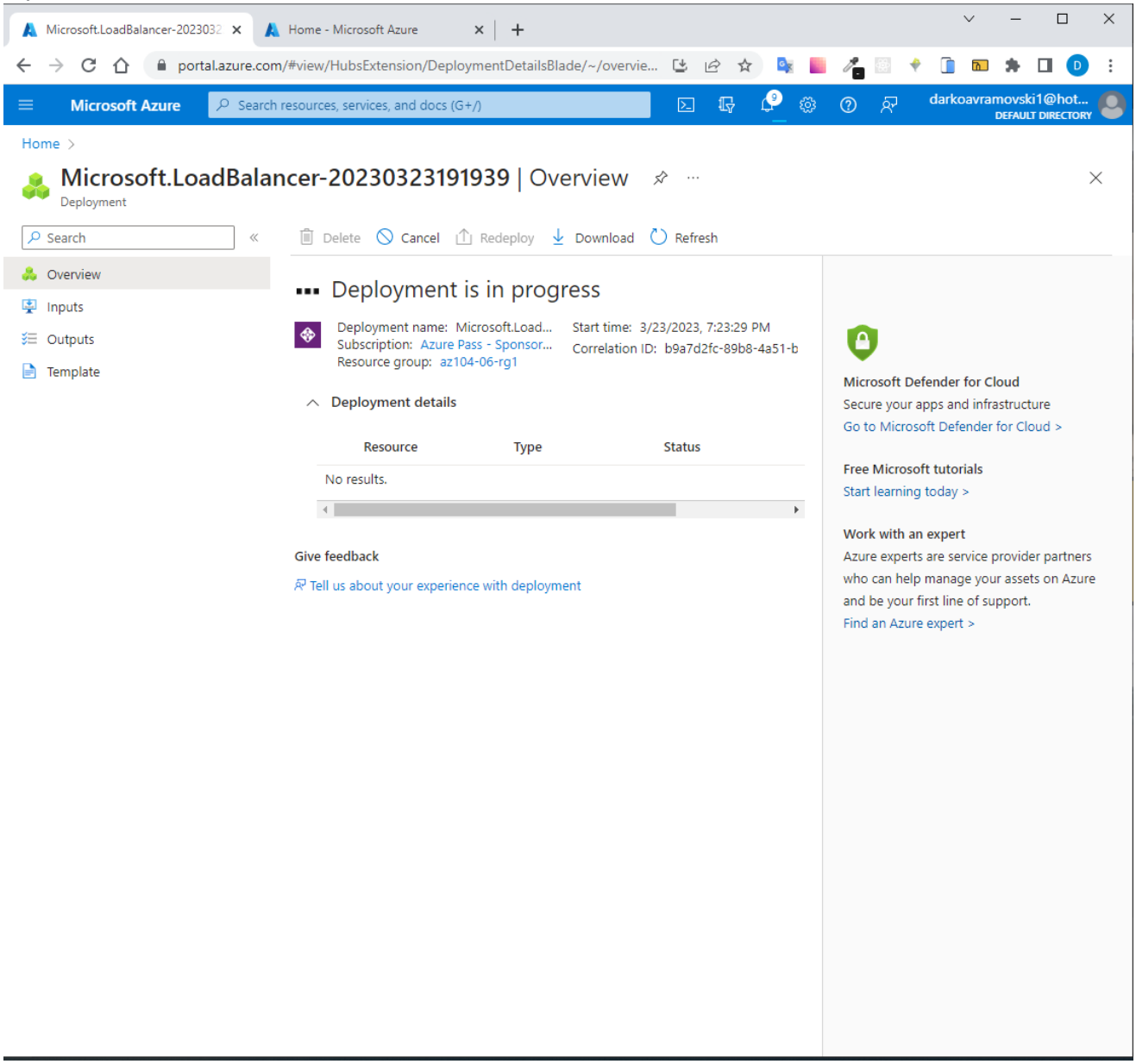


Navigate back to Route tables blade and click + Create.



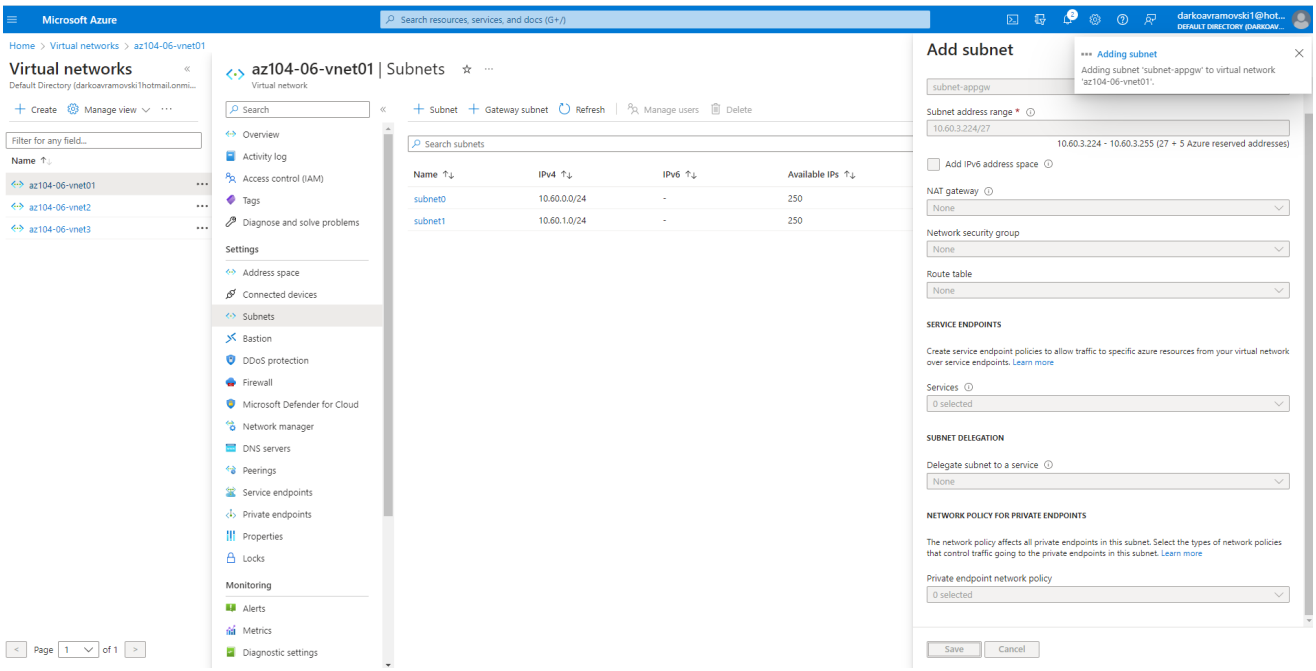
Task 5: Implement Azure Load Balancer

Open Load balancers click create



Task 6: Implement Azure Application Gateway

In the Azure portal, search and select Virtual networks. On the Virtual networks blade, in the list of virtual networks, click az104-06-vnet01.


Microsoft Azure
Search resources, services, and docs (G+/)
darkoavramovski1@hot...
DEFAULT DIRECTORY (DARKOAV...
Home > Virtual networks > az104-06-vnet01
Virtual networks
Default Directory (darkoavramovski1hotmail.onmi...
Create
Manage view
Filter for any field...
Name
az104-06-vnet01
az104-06-vnet2
az104-06-vnet3
Page 1 of 1
az104-06-vnet01 | Subnets
Virtual network
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Address space
Connected devices
Subnets
Bastion
DDoS protection
Firewall
Microsoft Defender for Cloud
Network manager
DNS servers
Peerings
Service endpoints
Private endpoints
Properties
Locks
Monitoring
Alerts
Metrics
Diagnostic settings
Subnet
Gateway subnet
Refresh
Manage users
Delete
Search subnets
Name
IPv4
IPv6
Available IPs
subnet0
10.60.0.0/24
250
subnet1
10.60.1.0/24
250
Add subnet
Adding subnet
Adding subnet 'subnet-appgw' to virtual network 'az104-06-vnet01'.
subnet-appgw
Subnet address range *
10.60.3.224/27
10.60.3.224 - 10.60.3.255 (27 + 5 Azure reserved addresses)
Add IPv6 address space
NAT gateway
None
Network security group
None
Route table
None
SERVICE ENDPOINTS
Create service endpoint policies to allow traffic to specific azure resources from your virtual network over service endpoints. Learn more
Services
0 selected
SUBNET DELEGATION
Delegate subnet to a service
None
NETWORK POLICY FOR PRIVATE ENDPOINTS
The network policy affects all private endpoints in this subnet. Select the types of network policies that control traffic going to the private endpoints in this subnet. Learn more
Private endpoint network policy
0 selected
Save
Cancel

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