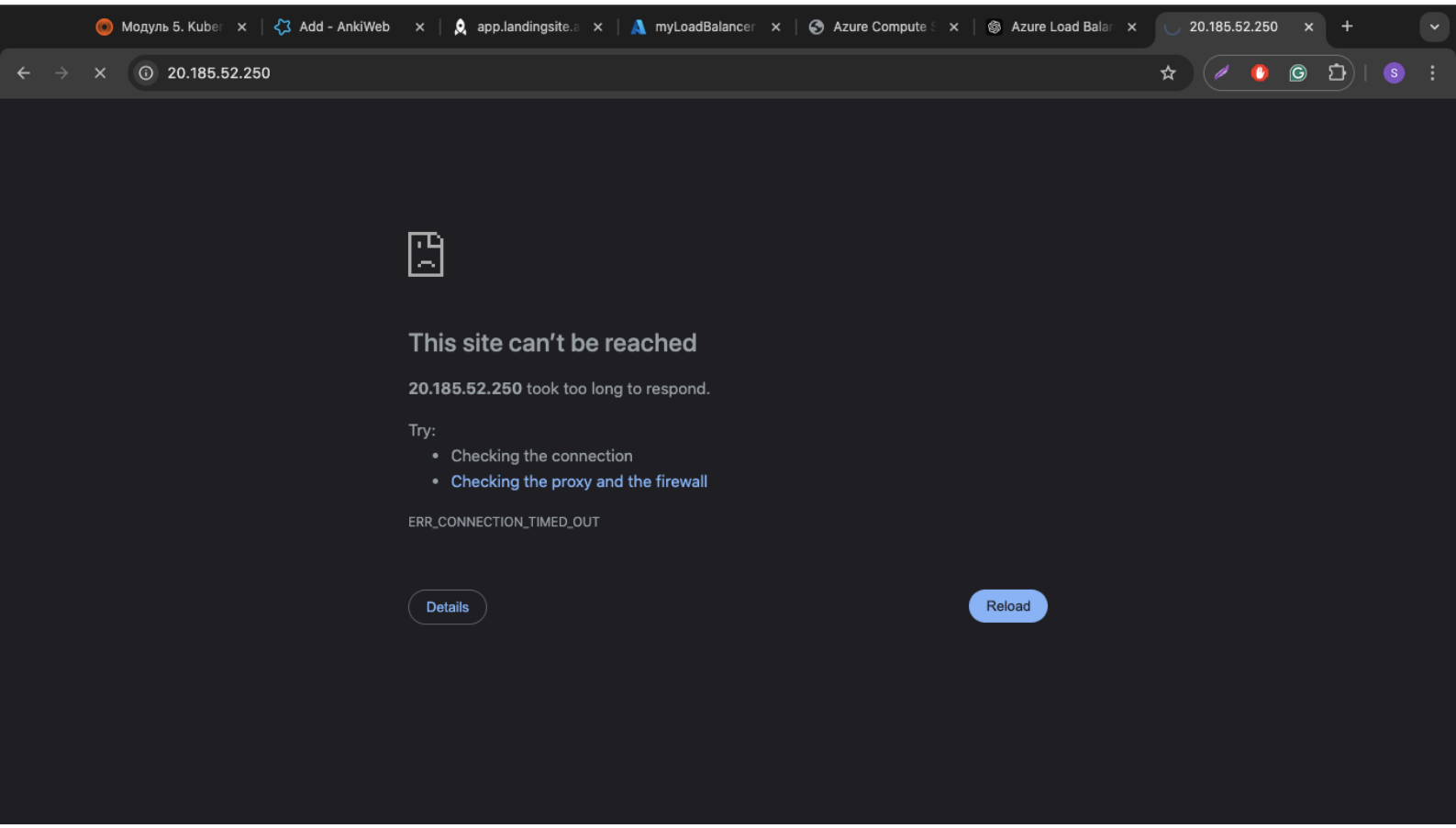
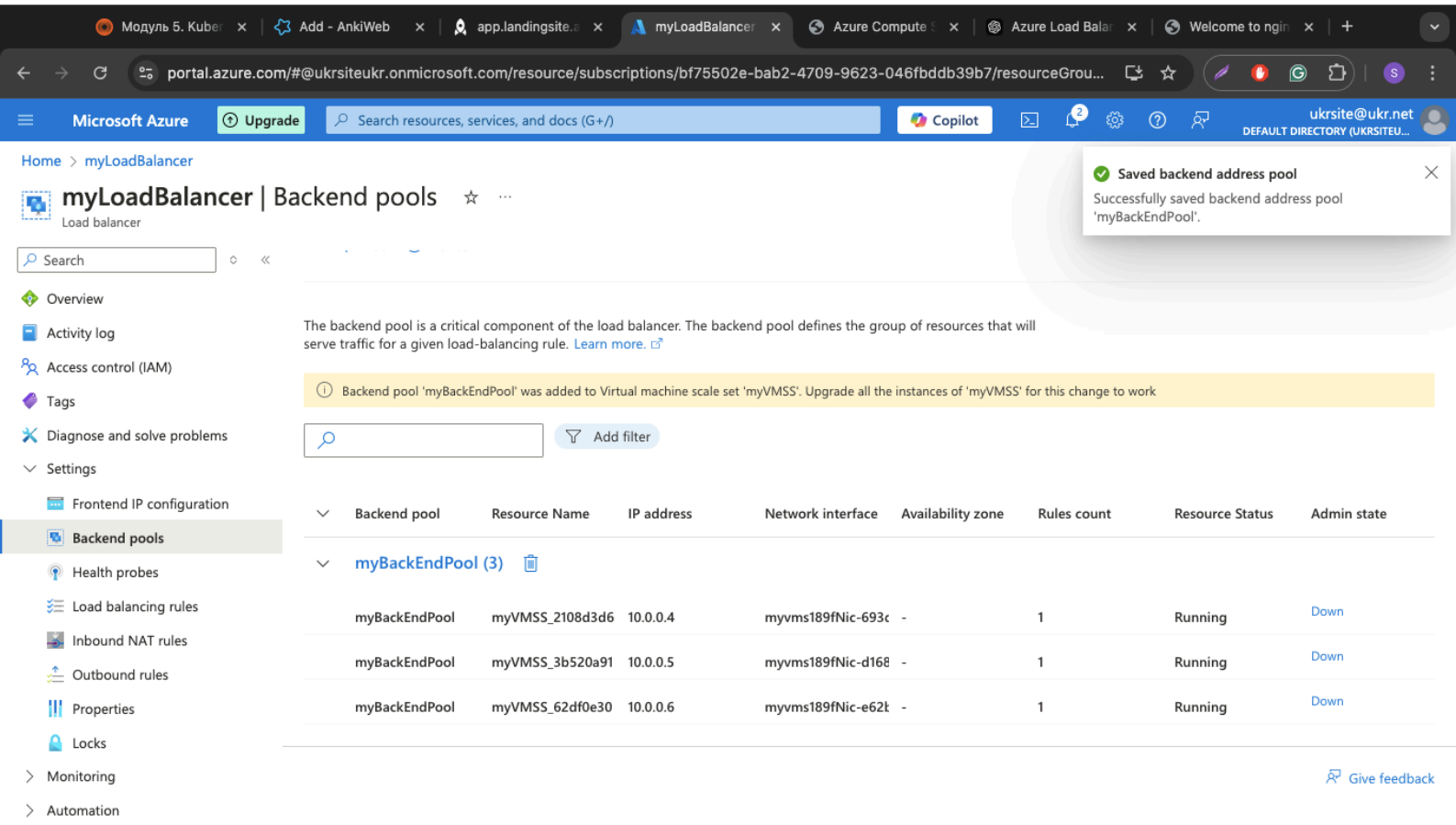
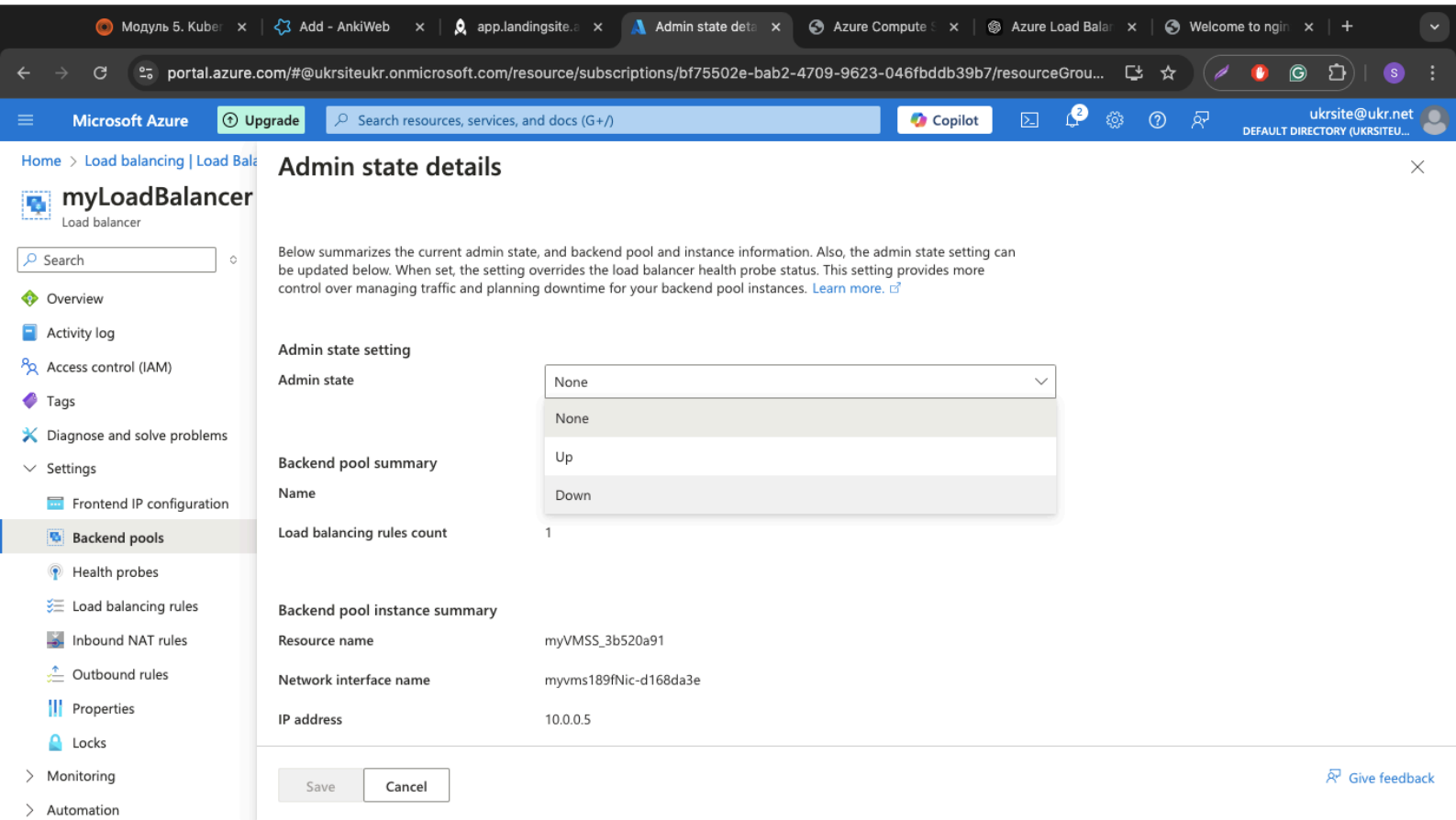
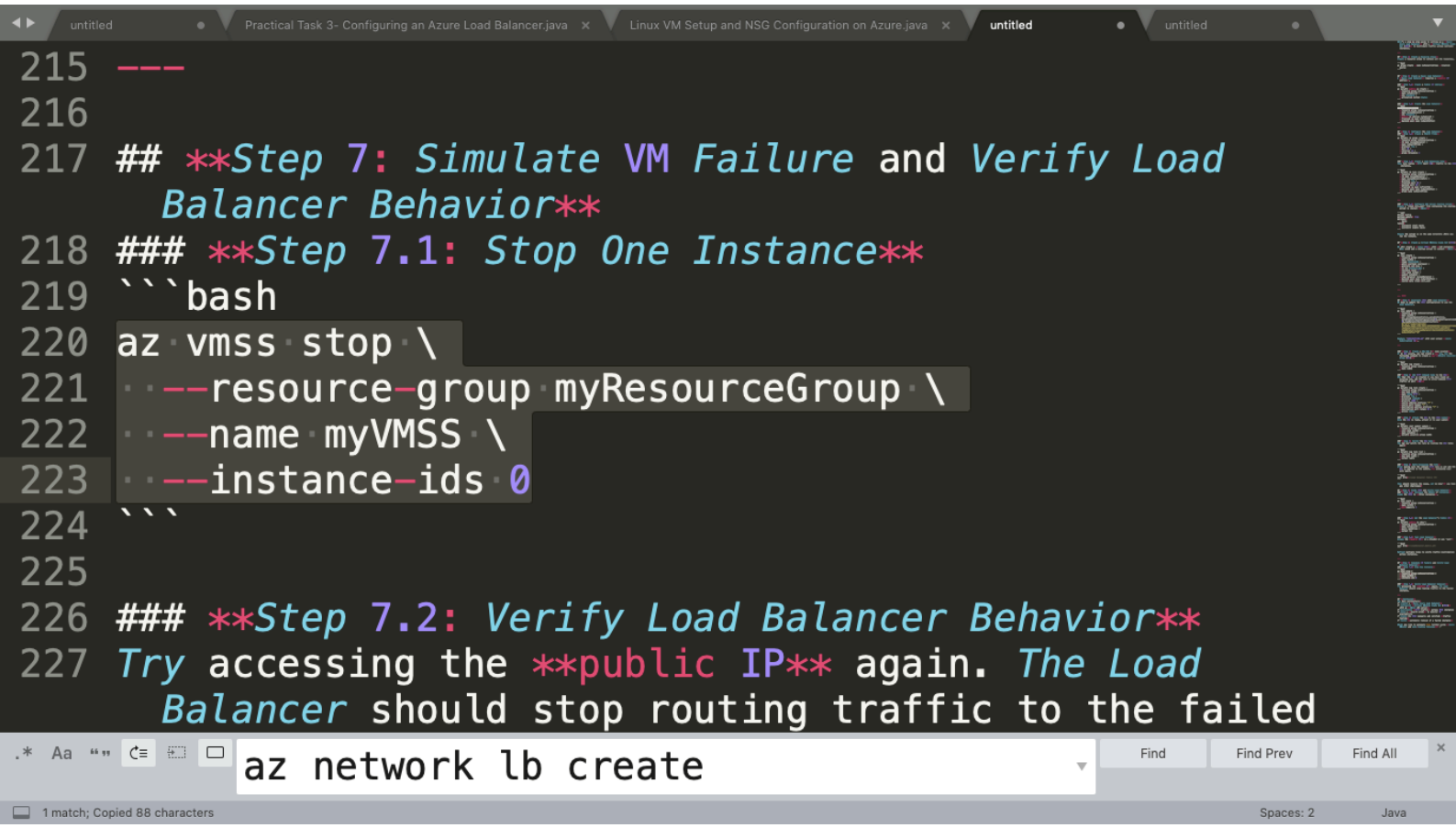
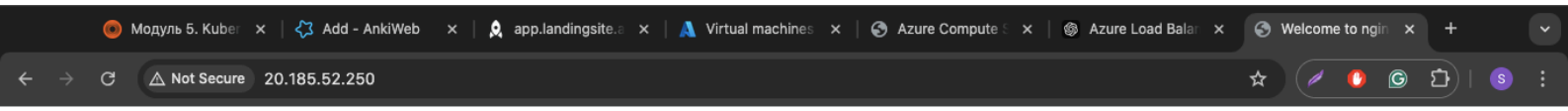

Модуль 5. Kube
Add - AnkiWeb
app.landingsite.a
myLoadBalancer
Azure Compute S
Azure Load Bala
20.185.52.250
20.185.52.250
This site can't be reached
20.185.52.250 took too long to respond.
Try:
Checking the connection
Checking the proxy and the firewall
ERR_CONNECTION_TIMED_OUT
Details
Reload


Модуль 5. Kuber
Add - AnkiWeb
app.landingsite.a
myLoadBalancer
Azure Compute S
Azure Load Bala
Welcome to ngin
portal.azure.com/#@ukrsiteukr.onmicrosoft.com/resource/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGrou...
Microsoft Azure
Upgrade
Search resources, services, and docs (G+/)
Copilot
ukrsite@ukr.net
DEFAULT DIRECTORY (UKRSITEU...
Home > myLoadBalancer
myLoadBalancer | Backend pools
Load balancer
Saved backend address pool
Successfully saved backend address pool 'myBackEndPool'.
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Frontend IP configuration
Backend pools
Health probes
Load balancing rules
Inbound NAT rules
Outbound rules
Properties
Locks
Monitoring
Automation
The backend pool is a critical component of the load balancer. The backend pool defines the group of resources that will serve traffic for a given load-balancing rule. Learn more.
Backend pool 'myBackEndPool' was added to Virtual machine scale set 'myVMSS'. Upgrade all the instances of 'myVMSS' for this change to work
Add filter
Backend pool
Resource Name
IP address
Network interface
Availability zone
Rules count
Resource Status
Admin state
myBackEndPool (3)
myBackEndPool myVMSS_2108d3d6 10.0.0.4 myvms189fNic-693c - 1 Running Down
myBackEndPool myVMSS_3b520a91 10.0.0.5 myvms189fNic-d168 - 1 Running Down
myBackEndPool myVMSS_62df0e30 10.0.0.6 myvms189fNic-e62b - 1 Running Down
Give feedback


Модуль 5. Kuber
Add - AnkiWeb
app.landingsite.a
Admin state deta
Azure Compute S
Azure Load Balar
Welcome to ngin
portal.azure.com/#@ukrsiteukr.onmicrosoft.com/resource/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGrou...
Microsoft Azure
Upgrade
Search resources, services, and docs (G+/)
Copilot
ukrsite@ukr.net
DEFAULT DIRECTORY (UKRSITEU...
Home > Load balancing | Load Bala
myLoadBalancer
Load balancer
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Frontend IP configuration
Backend pools
Health probes
Load balancing rules
Inbound NAT rules
Outbound rules
Properties
Locks
Monitoring
Automation
Admin state details
Below summarizes the current admin state, and backend pool and instance information. Also, the admin state setting can be updated below. When set, the setting overrides the load balancer health probe status. This setting provides more control over managing traffic and planning downtime for your backend pool instances. Learn more.
Admin state setting
Admin state
None
None
Up
Down
Backend pool summary
Name
Load balancing rules count
1
Backend pool instance summary
Resource name
myVMSS_3b520a91
Network interface name
myvms189fNic-d168da3e
IP address
10.0.0.5
Save
Cancel
Give feedback


untitled
Practical Task 3- Configuring an Azure Load Balancer.java
Linux VM Setup and NSG Configuration on Azure.java
untitled
untitled
215 ---
216
217 ## **Step 7: Simulate VM Failure and Verify Load Balancer Behavior**
218 ### **Step 7.1: Stop One Instance**
219 ```bash
220 az vmss stop \
221 --resource-group myResourceGroup \
222 --name myVMSS \
223 --instance-ids 0
224 ```
225
226 ### **Step 7.2: Verify Load Balancer Behavior**
227 Try accessing the **public IP** again. The Load Balancer should stop routing traffic to the failed
az network lb create
Find
Find Prev
Find All
1 match; Copied 88 characters
Spaces: 2
Java

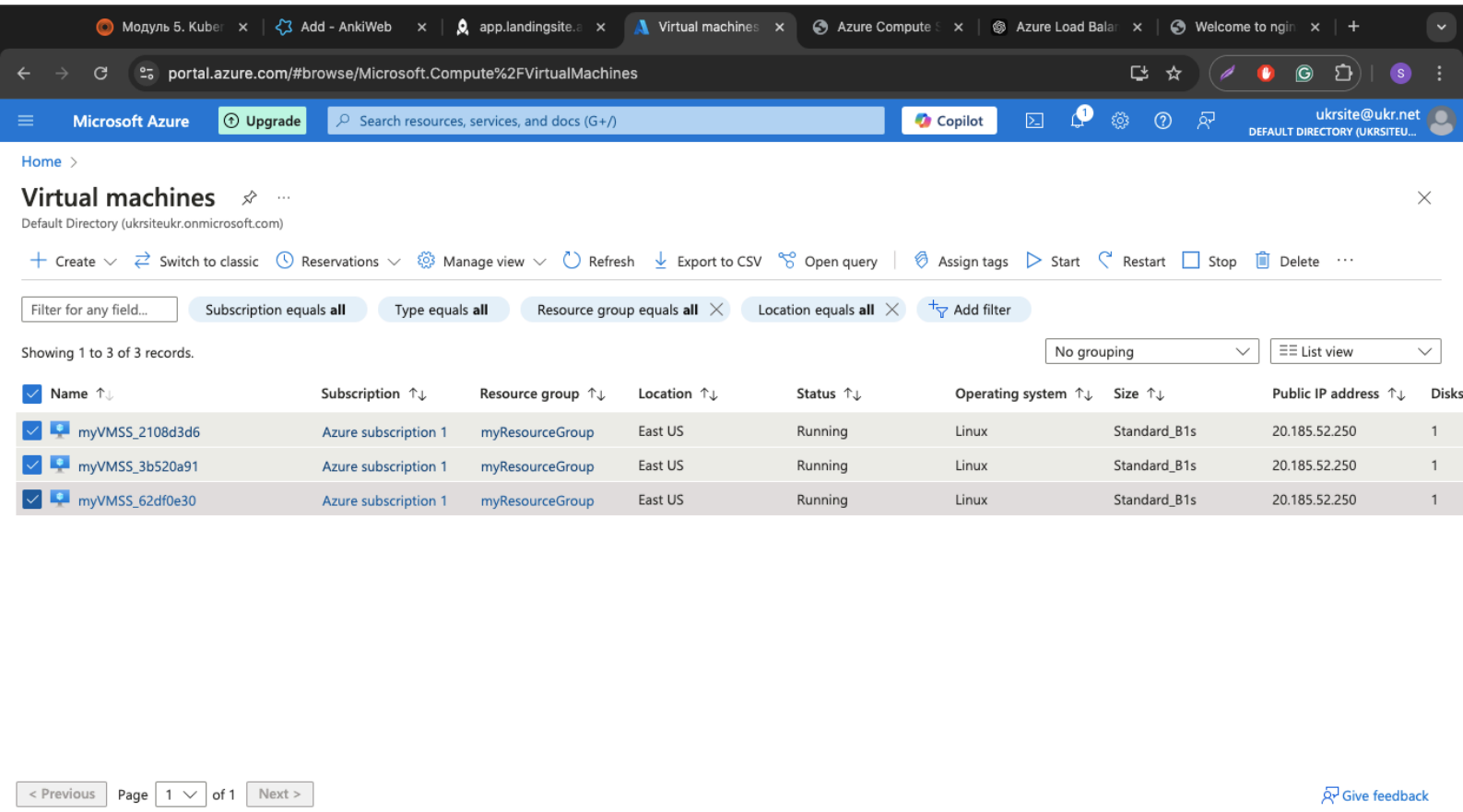


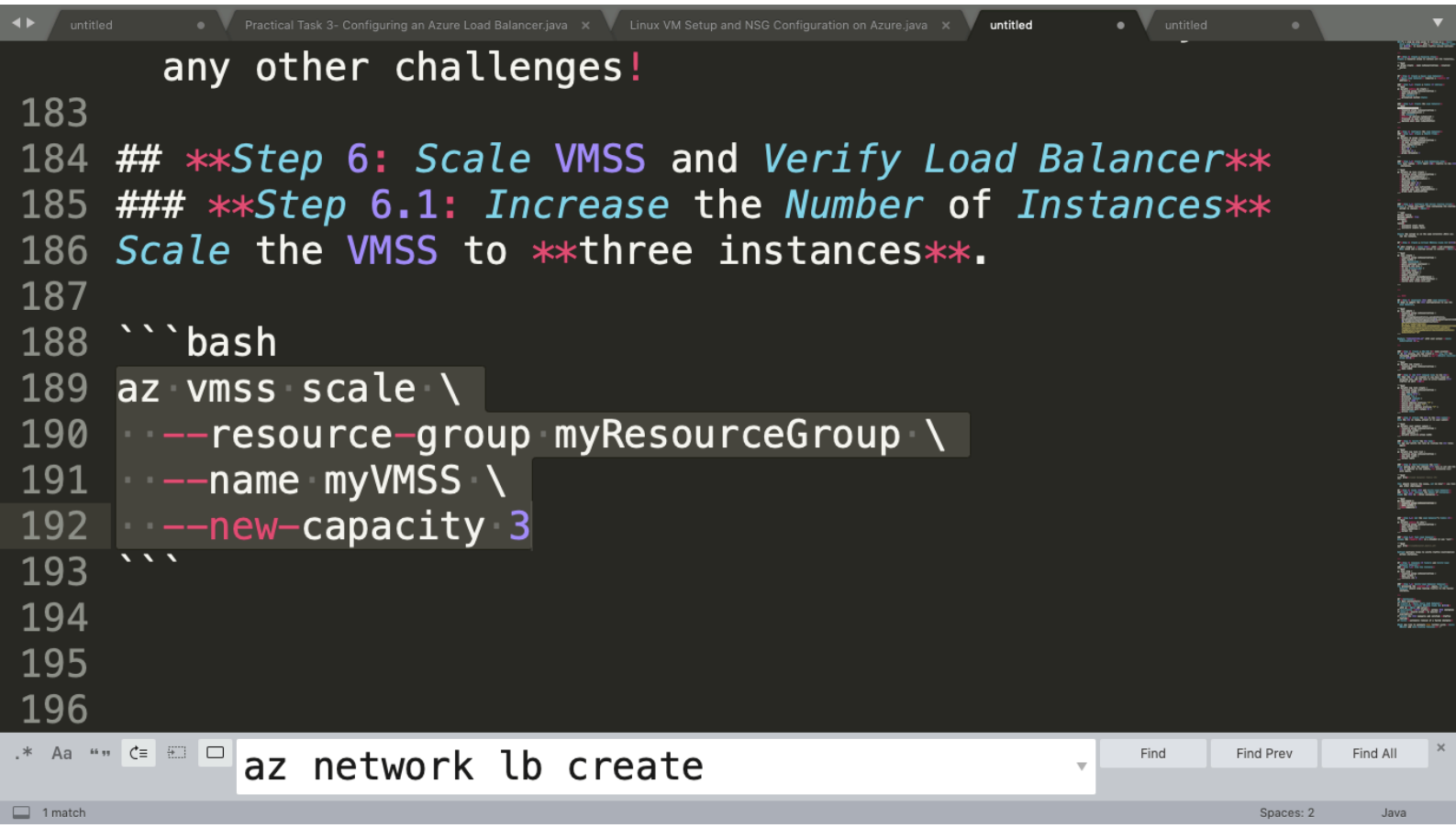

# Welcome to nginx!

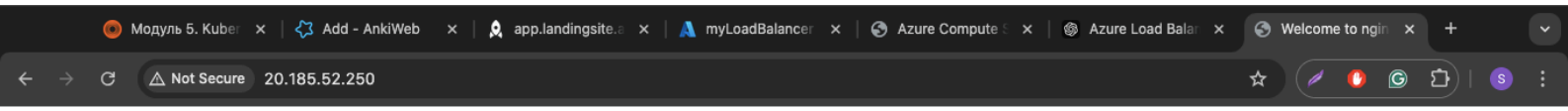
If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

*Thank you for using nginx.*


Модуль 5. Kuber
Add - AnkiWeb
app.landingsite.a
Virtual machines
Azure Compute S
Azure Load Balar
Welcome to ngin
portal.azure.com/#browse/Microsoft.Compute%2FVirtualMachines
Microsoft Azure
Upgrade
Search resources, services, and docs (G+/)
Copilot
ukrsite@ukr.net
DEFAULT DIRECTORY (UKRSITEU...
Home
Virtual machines
Default Directory (ukrsiteukr.onmicrosoft.com)
Create
Switch to classic
Reservations
Manage view
Refresh
Export to CSV
Open query
Assign tags
Start
Restart
Stop
Delete
Filter for any field...
Subscription equals all
Type equals all
Resource group equals all
Location equals all
Add filter
Showing 1 to 3 of 3 records.
No grouping
List view
Name
Subscription
Resource group
Location
Status
Operating system
Size
Public IP address
Disks
myVMSS_2108d3d6
Azure subscription 1
myResourceGroup
East US
Running
Linux
Standard_B1s
20.185.52.250
1
myVMSS_3b520a91
Azure subscription 1
myResourceGroup
East US
Running
Linux
Standard_B1s
20.185.52.250
1
myVMSS_62df0e30
Azure subscription 1
myResourceGroup
East US
Running
Linux
Standard_B1s
20.185.52.250
1
< Previous
Page 1 of 1
Next >
Give feedback


untitled
Practical Task 3- Configuring an Azure Load Balancer.java
Linux VM Setup and NSG Configuration on Azure.java
untitled
untitled
any other challenges!
183
184 ## **Step 6: Scale VMSS and Verify Load Balancer**
185 ### **Step 6.1: Increase the Number of Instances**
186 Scale the VMSS to **three instances**.
187
188 ```bash
189 az vmss scale \
190 --resource-group myResourceGroup \
191 --name myVMSS \
192 --new-capacity 3
193 ```
194
195
196
az network lb create
Find
Find Prev
Find All
1 match
Spaces: 2
Java




# Welcome to nginx!

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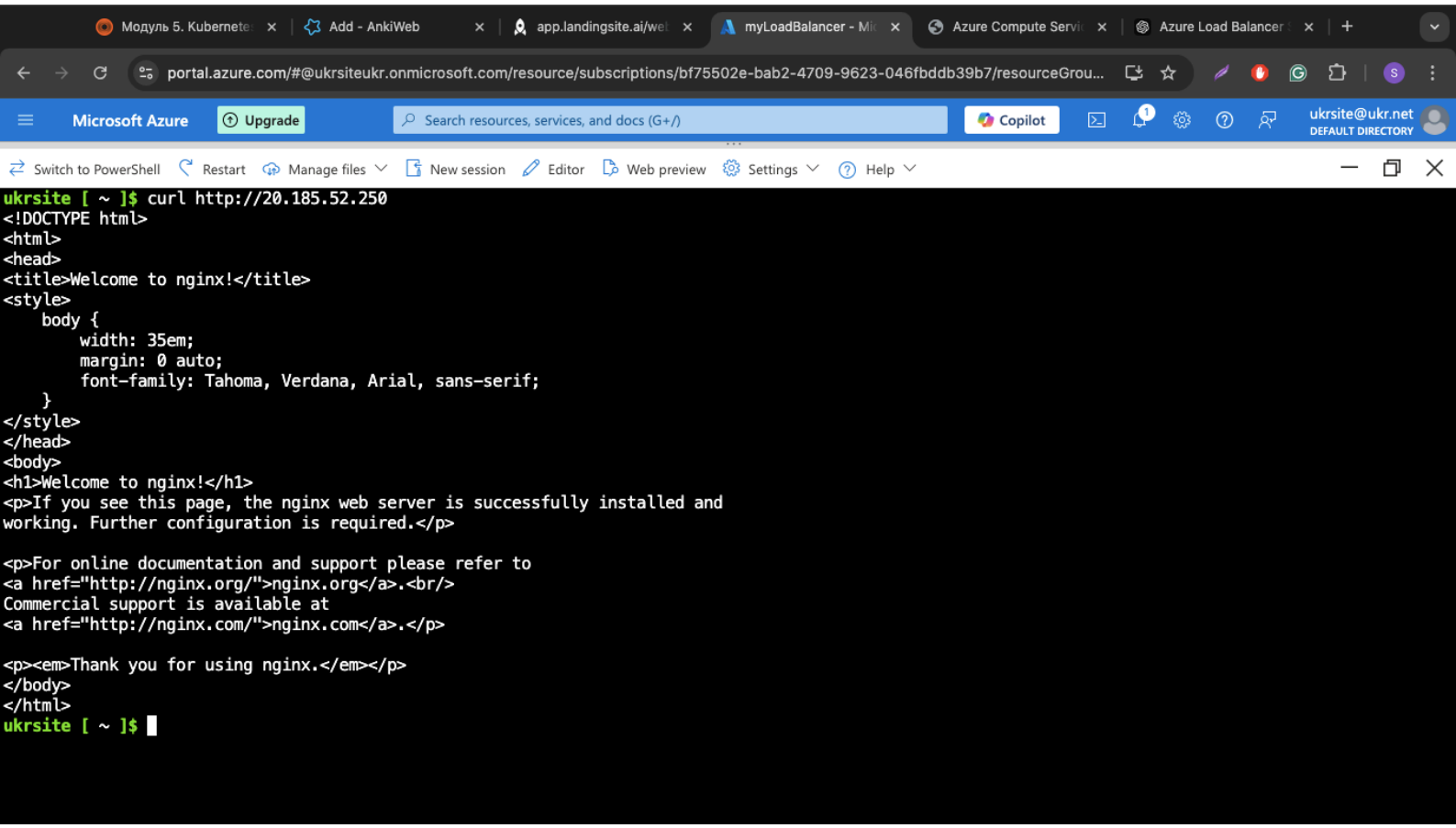
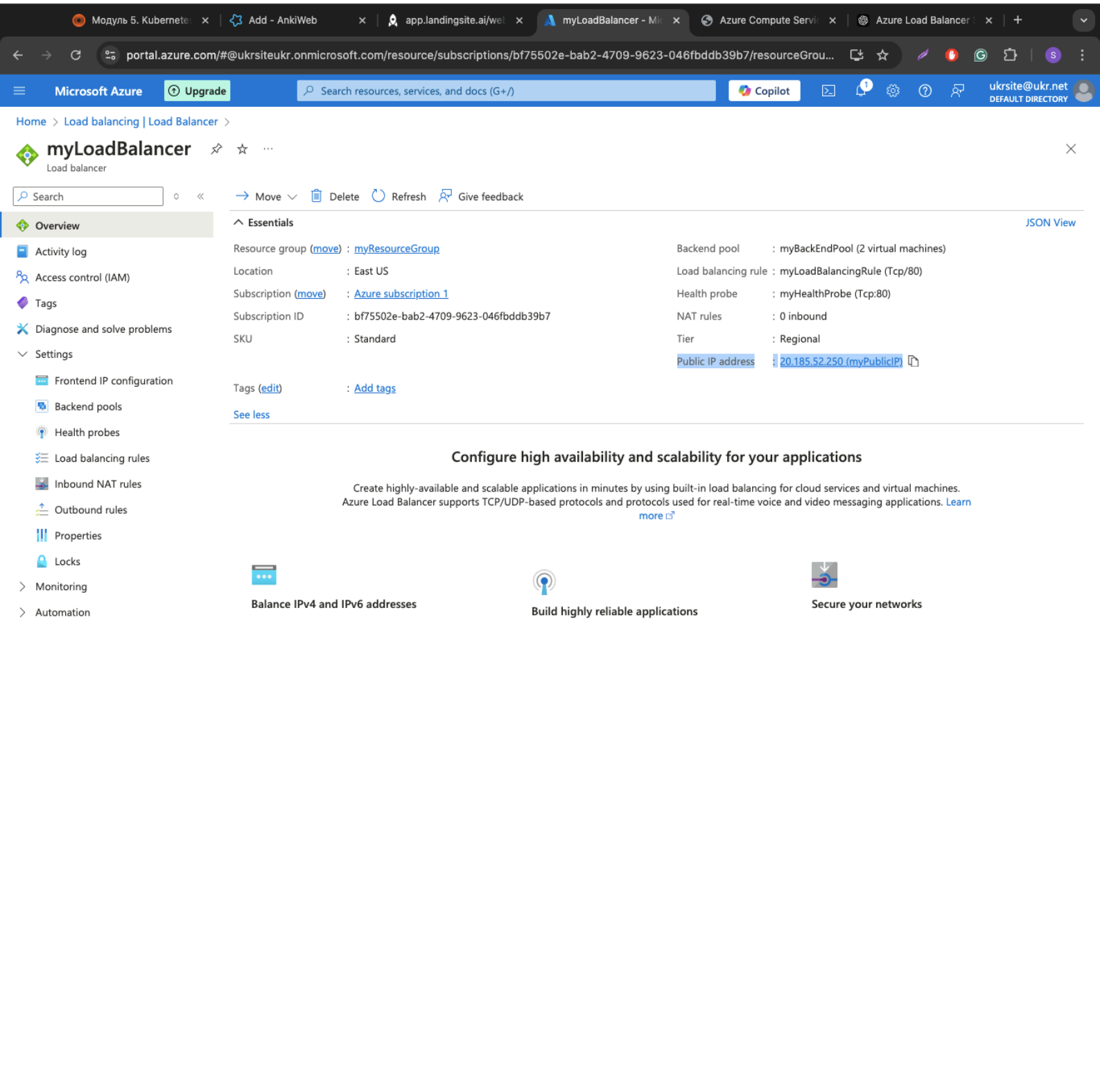
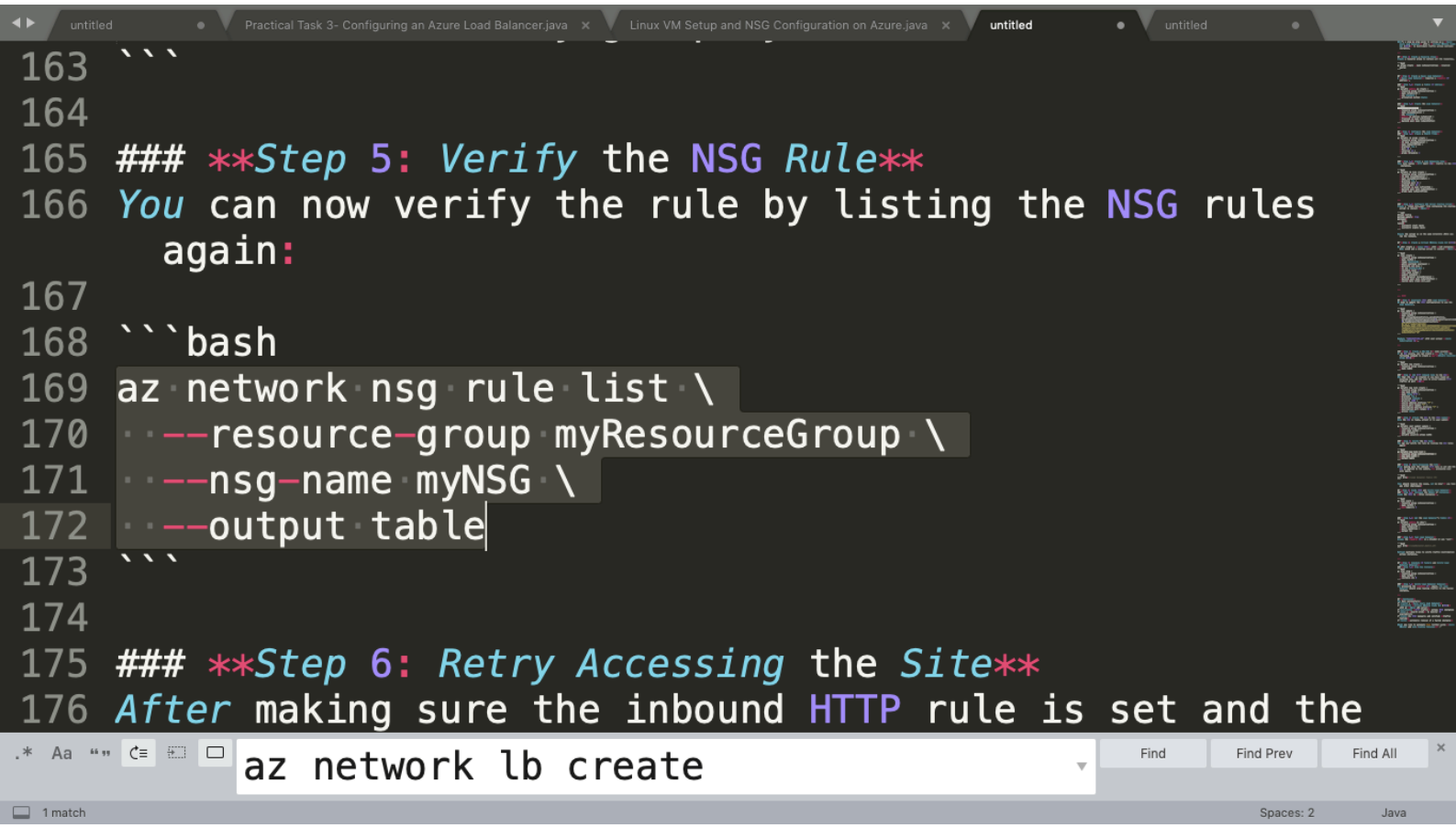
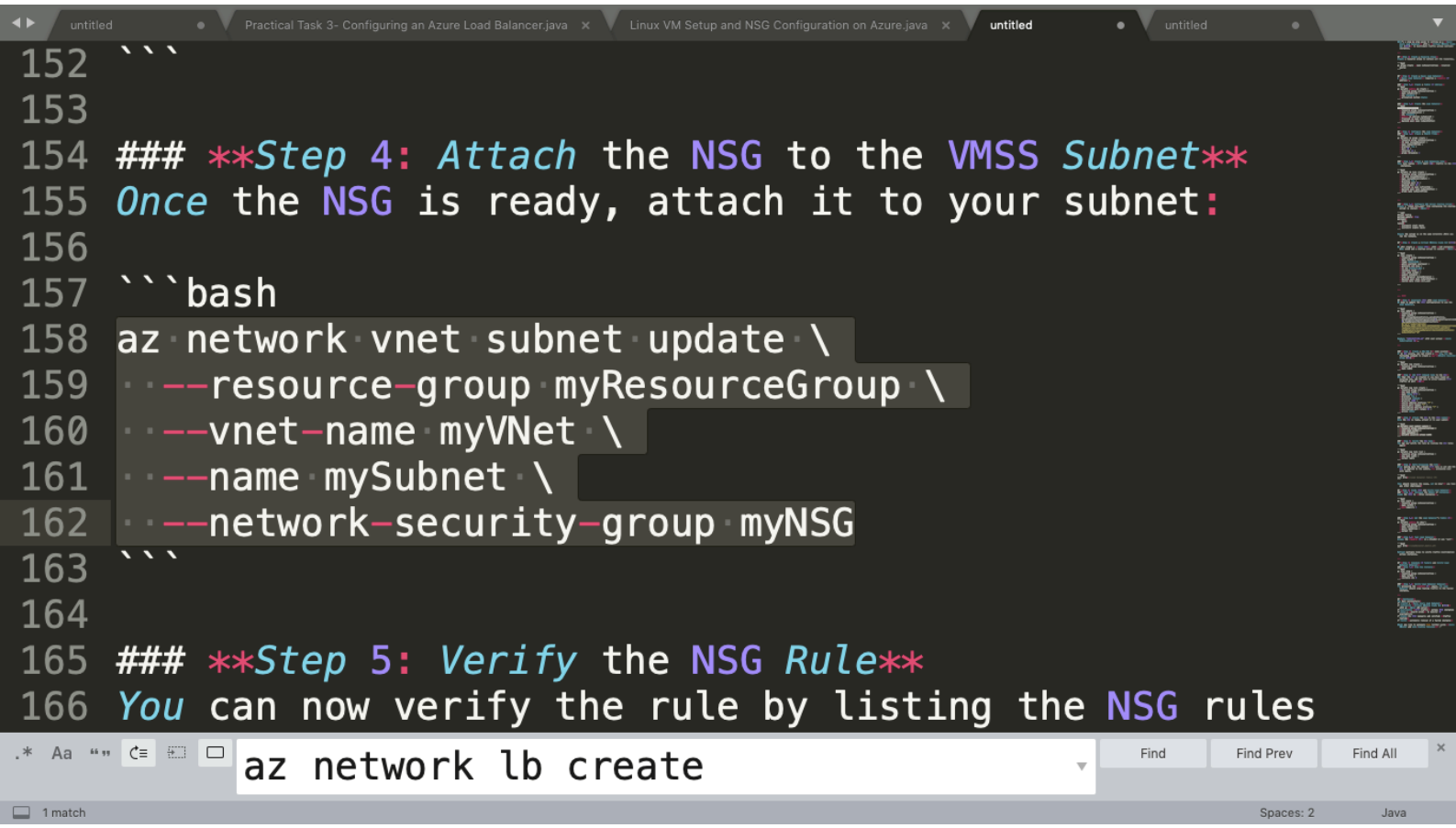
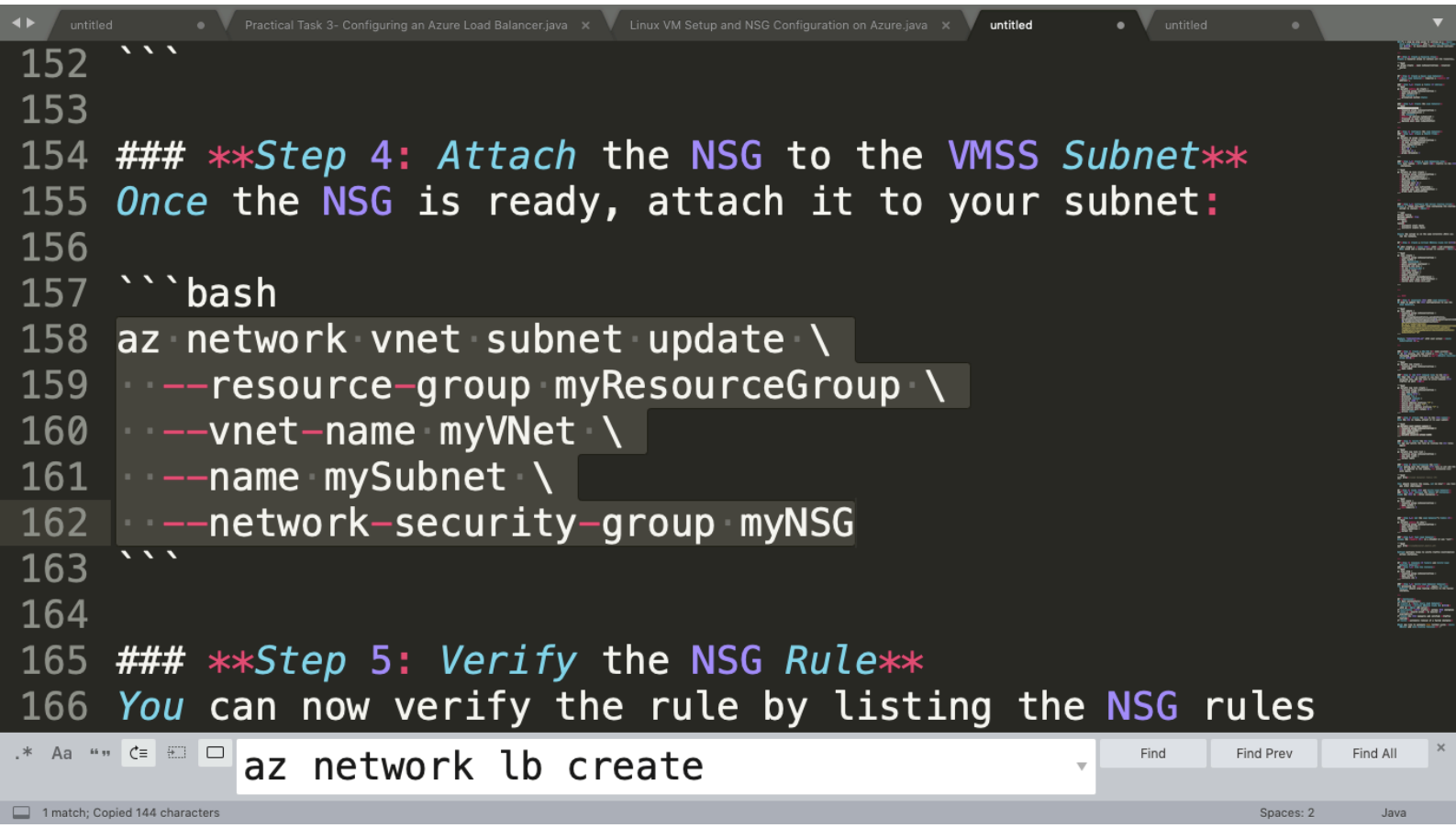
*Thank you for using nginx.*

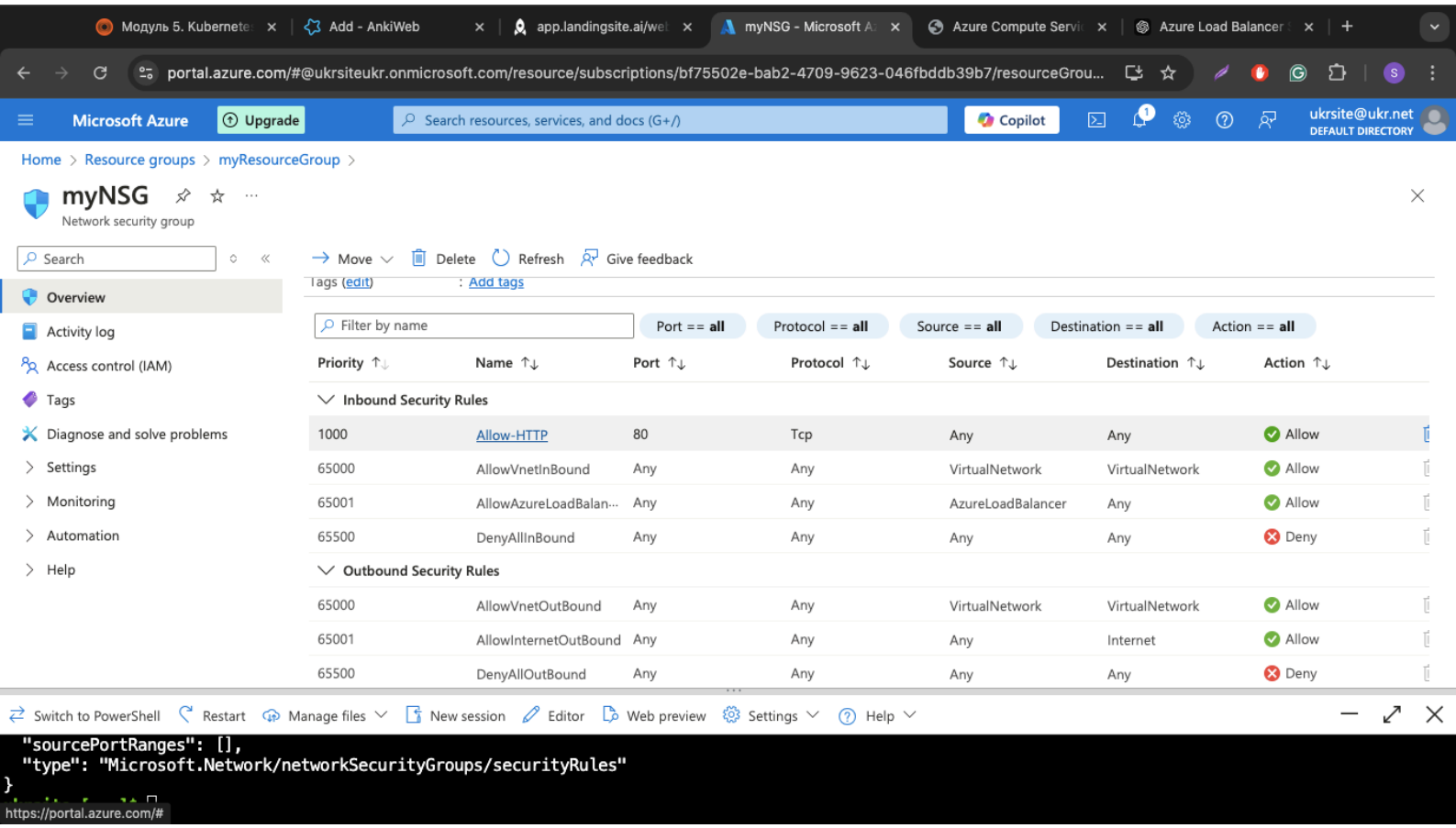

Модуль 5. Kubernete
Add - AnkiWeb
app.landingsite.ai/wel
myLoadBalancer - Mic
Azure Compute Servic
Azure Load Balancer
portal.azure.com/#@ukrsiteukr.onmicrosoft.com/resource/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGrou...
Microsoft Azure
Upgrade
Search resources, services, and docs (G+/)
Copilot
ukrsite@ukr.net
DEFAULT DIRECTORY
Switch to PowerShell
Restart
Manage files
New session
Editor
Web preview
Settings
Help
ukrsite [ ~ ]$ curl http://20.185.52.250
<!DOCTYPE html>
<html>
<head>
<title>Welcome to nginx!</title>
<style>
body {
width: 35em;
margin: 0 auto;
font-family: Tahoma, Verdana, Arial, sans-serif;
}
</style>
</head>
<body>
<h1>Welcome to nginx!</h1>
If you see this page, the nginx web server is successfully installed and
working. Further configuration is required.
For online documentation and support please refer to
<a href="http://nginx.org/">nginx.org</a>.<br/>
Commercial support is available at
<a href="http://nginx.com/">nginx.com</a>.
Thank you for using nginx.
</body>
</html>
ukrsite [ ~ ]$

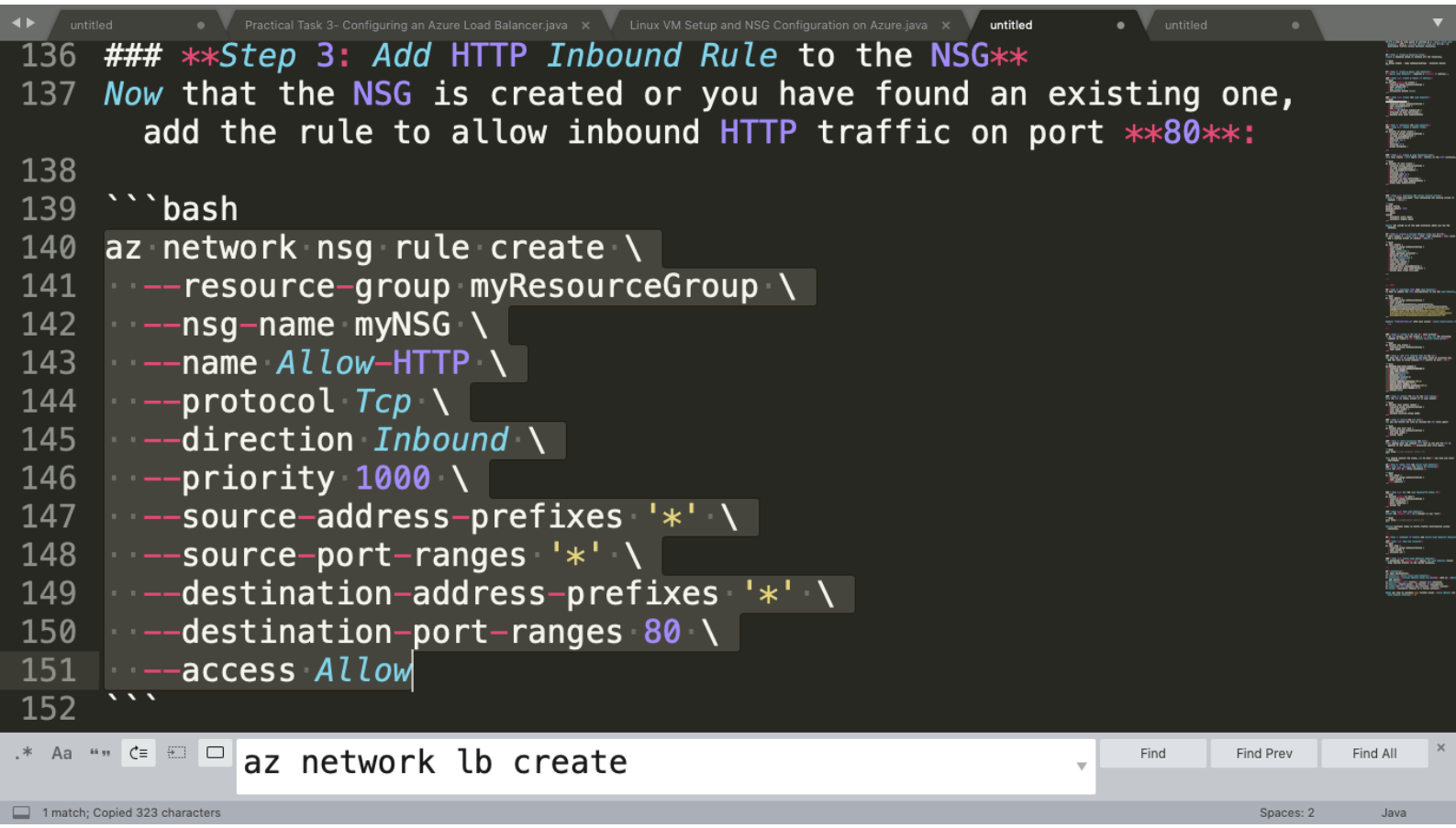

Модуль 5. Kubernete
Add - AnkiWeb
app.landingsite.ai/we
myLoadBalancer - Mic
Azure Compute Servic
Azure Load Balancer
portal.azure.com/#@ukrsiteukr.onmicrosoft.com/resource/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGrou...
Microsoft Azure
Upgrade
Search resources, services, and docs (G+/)
Copilot
ukrsite@ukr.net
DEFAULT DIRECTORY
Home > Load balancing | Load Balancer >
myLoadBalancer
Load balancer
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Frontend IP configuration
Backend pools
Health probes
Load balancing rules
Inbound NAT rules
Outbound rules
Properties
Locks
Monitoring
Automation
Move
Delete
Refresh
Give feedback
Essentials
JSON View
Resource group (move) : myResourceGroup
Location : East US
Subscription (move) : Azure subscription 1
Subscription ID : bf75502e-bab2-4709-9623-046fbddb39b7
SKU : Standard
Backend pool : myBackEndPool (2 virtual machines)
Load balancing rule : myLoadBalancingRule (Tcp/80)
Health probe : myHealthProbe (Tcp:80)
NAT rules : 0 inbound
Tier : Regional
Public IP address : 20.185.52.250 (myPublicIP)
Tags (edit) : Add tags
See less
Configure high availability and scalability for your applications
Create highly-available and scalable applications in minutes by using built-in load balancing for cloud services and virtual machines.
Azure Load Balancer supports TCP/UDP-based protocols and protocols used for real-time voice and video messaging applications. Learn more
Balance IPv4 and IPv6 addresses
Build highly reliable applications
Secure your networks

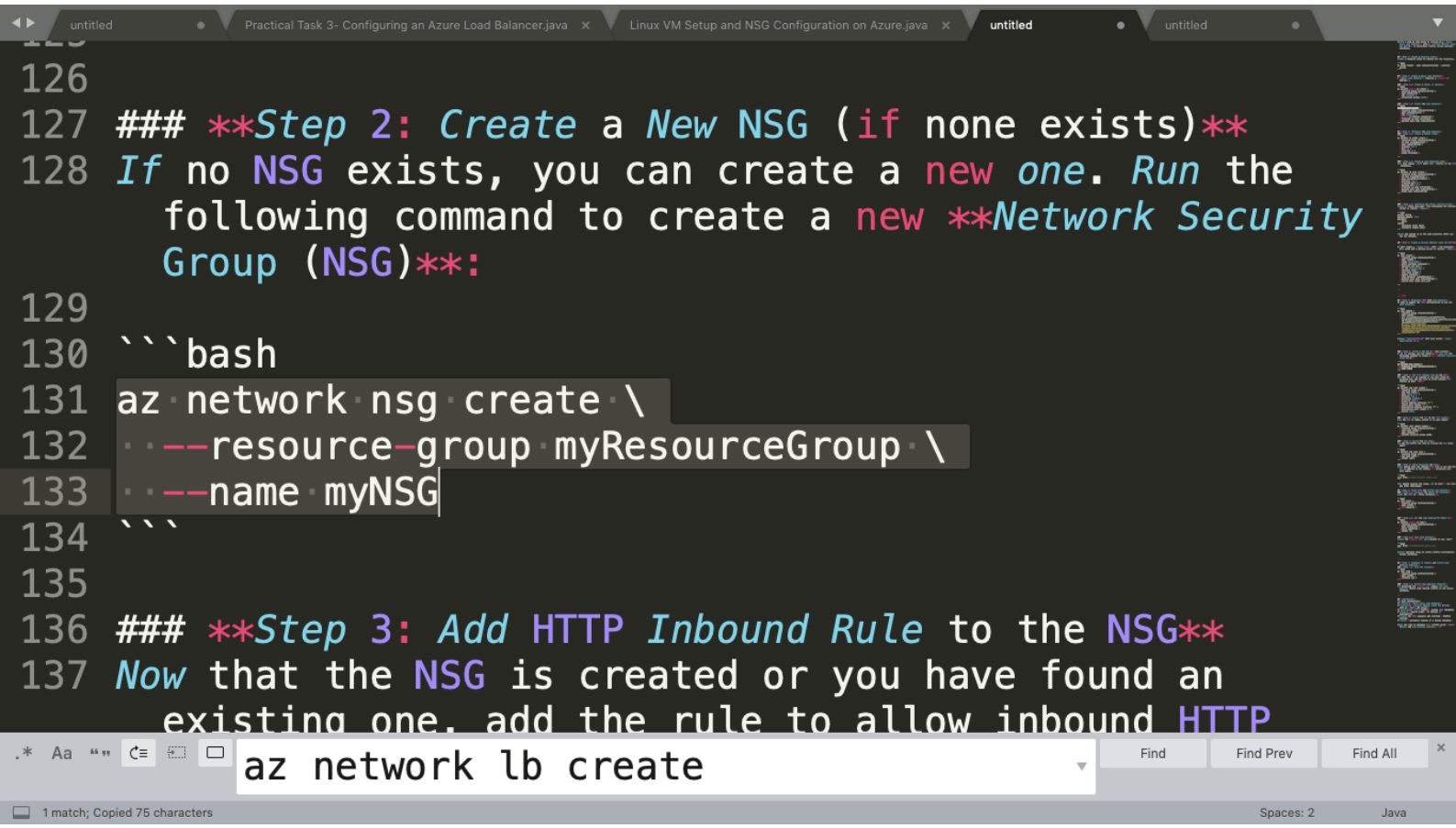

untitled
Practical Task 3- Configuring an Azure Load Balancer.java
Linux VM Setup and NSG Configuration on Azure.java
untitled
untitled
163 ```
164
165 ### **Step 5: Verify the NSG Rule**
166 You can now verify the rule by listing the NSG rules again:
167
168 ```bash
169 az network nsg rule list \
170 --resource-group myResourceGroup \
171 --nsg-name myNSG \
172 --output table
173 ```
174
175 ### **Step 6: Retry Accessing the Site**
176 After making sure the inbound HTTP rule is set and the
az network lb create
Find
Find Prev
Find All
1 match
Spaces: 2
Java

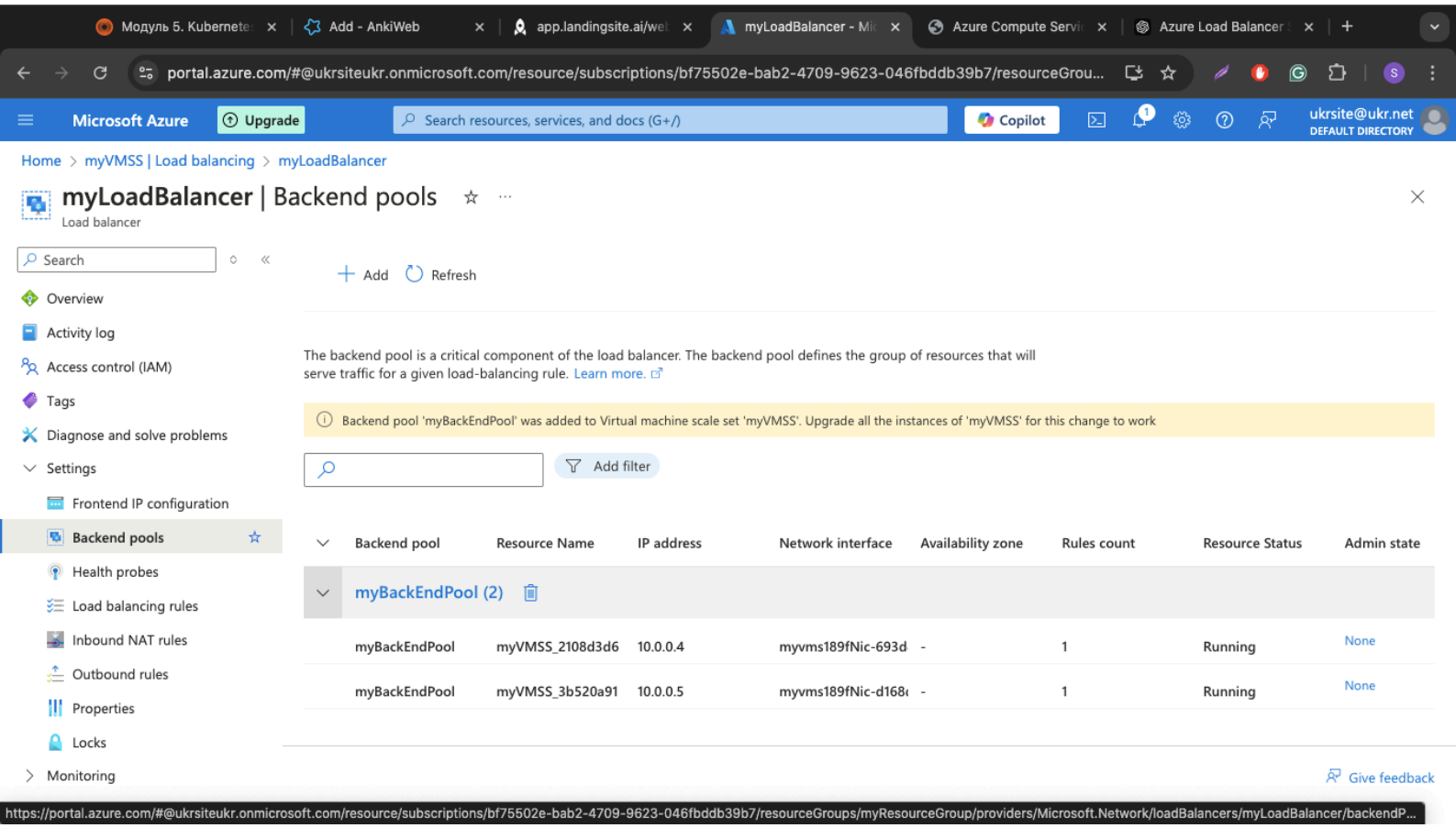

untitled
Practical Task 3- Configuring an Azure Load Balancer.java
Linux VM Setup and NSG Configuration on Azure.java
untitled
untitled
152 ```
153
154 ### **Step 4: Attach the NSG to the VMSS Subnet**
155 Once the NSG is ready, attach it to your subnet:
156
157 ```bash
158 az network vnet subnet update \
159 --resource-group myResourceGroup \
160 --vnet-name myVNet \
161 --name mySubnet \
162 --network-security-group myNSG
163 ```
164
165 ### **Step 5: Verify the NSG Rule**
166 You can now verify the rule by listing the NSG rules
az network lb create
Find
Find Prev
Find All
1 match
Spaces: 2
Java

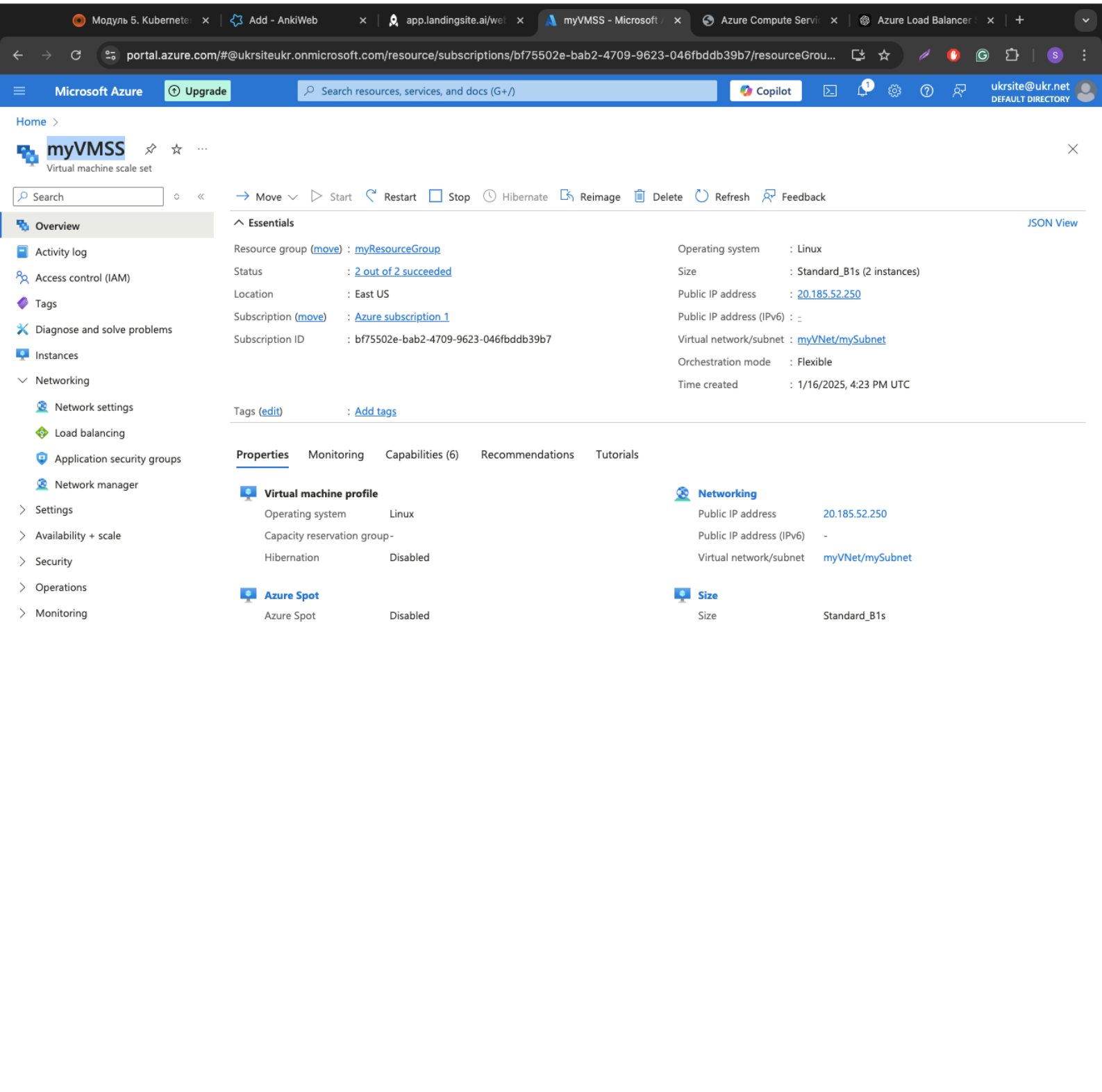

untitled
Practical Task 3- Configuring an Azure Load Balancer.java
Linux VM Setup and NSG Configuration on Azure.java
untitled
untitled
152 ```
153
154 ### **Step 4: Attach the NSG to the VMSS Subnet**
155 Once the NSG is ready, attach it to your subnet:
156
157 ```bash
158 az network vnet subnet update \
159 --resource-group myResourceGroup \
160 --vnet-name myVNet \
161 --name mySubnet \
162 --network-security-group myNSG
163 ```
164
165 ### **Step 5: Verify the NSG Rule**
166 You can now verify the rule by listing the NSG rules
az network lb create
Find
Find Prev
Find All
1 match; Copied 144 characters
Spaces: 2
Java

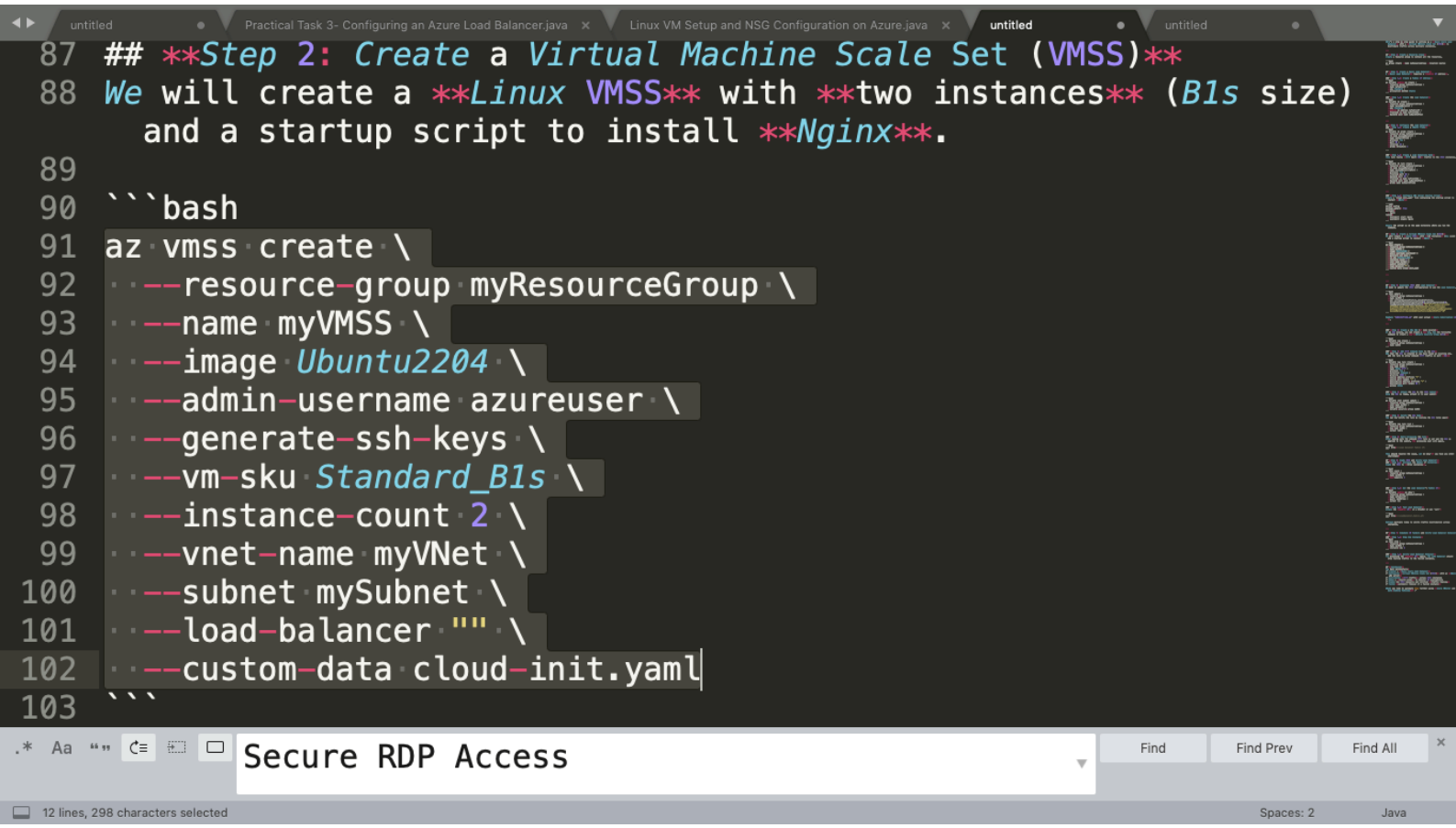

Модуль 5. Kubernete
Add - AnkiWeb
app.landingsite.ai/we
myNSG - Microsoft A
Azure Compute Servi
Azure Load Balancer
portal.azure.com/#@ukrsiteukr.onmicrosoft.com/resource/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGrou...
Microsoft Azure
Upgrade
Search resources, services, and docs (G+/)
Copilot
ukrsite@ukr.net
DEFAULT DIRECTORY
Home > Resource groups > myResourceGroup >
myNSG
Network security group
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Monitoring
Automation
Help
Move
Delete
Refresh
Give feedback
Tags (edit) : Add tags
Filter by name
Port == all
Protocol == all
Source == all
Destination == all
Action == all
Priority
Name
Port
Protocol
Source
Destination
Action
Inbound Security Rules
1000 Allow-HTTP 80 Tcp Any Any Allow
65000 AllowVnetInBound Any Any VirtualNetwork VirtualNetwork Allow
65001 AllowAzureLoadBalan... Any Any AzureLoadBalancer Any Allow
65500 DenyAllInBound Any Any Any Any Deny
Outbound Security Rules
65000 AllowVnetOutBound Any Any VirtualNetwork VirtualNetwork Allow
65001 AllowInternetOutBound Any Any Any Internet Allow
65500 DenyAllOutBound Any Any Any Any Deny
Switch to PowerShell
Restart
Manage files
New session
Editor
Web preview
Settings
Help
"sourcePortRanges": [],
"type": "Microsoft.Network/networkSecurityGroups/securityRules"
}
https://portal.azure.com/#

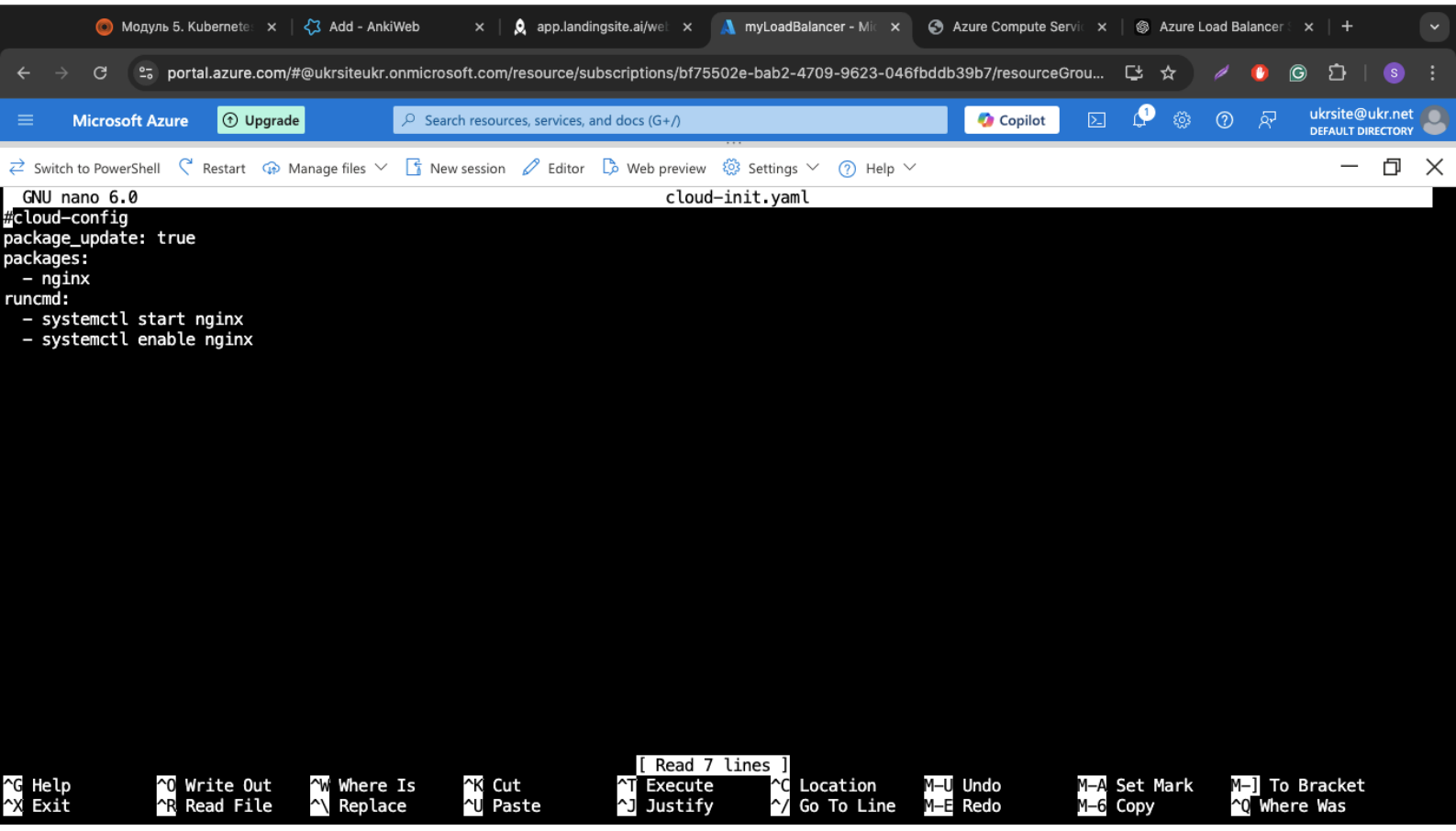

untitled
Practical Task 3- Configuring an Azure Load Balancer.java
Linux VM Setup and NSG Configuration on Azure.java
untitled
untitled
136 ### **Step 3: Add HTTP Inbound Rule to the NSG**
137 Now that the NSG is created or you have found an existing one, add the rule to allow inbound HTTP traffic on port **80**:
138
139 ```bash
140 az network nsg rule create \
141 --resource-group myResourceGroup \
142 --nsg-name myNSG \
143 --name Allow-HTTP \
144 --protocol Tcp \
145 --direction Inbound \
146 --priority 1000 \
147 --source-address-prefixes '*' \
148 --source-port-ranges '*' \
149 --destination-address-prefixes '*' \
150 --destination-port-ranges 80 \
151 --access Allow
152 ```
.* Aa
az network lb create
Find
Find Prev
Find All
1 match; Copied 323 characters
Spaces: 2
Java


untitled
Practical Task 3- Configuring an Azure Load Balancer.java
Linux VM Setup and NSG Configuration on Azure.java
untitled
untitled
126
127 ### **Step 2: Create a New NSG (if none exists)**
128 If no NSG exists, you can create a new one. Run the following command to create a new **Network Security Group (NSG)**:
129
130 ```bash
131 az network nsg create \
132 --resource-group myResourceGroup \
133 --name myNSG
134 ```
135
136 ### **Step 3: Add HTTP Inbound Rule to the NSG**
137 Now that the NSG is created or you have found an existing one, add the rule to allow inbound HTTP
az network lb create
Find
Find Prev
Find All
1 match; Copied 75 characters
Spaces: 2
Java


Модуль 5. Kubernete
Add - AnkiWeb
app.landingsite.ai/we
myLoadBalancer - Mic
Azure Compute Servic
Azure Load Balancer
portal.azure.com/#@ukrsiteukr.onmicrosoft.com/resource/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGrou...
Microsoft Azure
Upgrade
Search resources, services, and docs (G+/)
Copilot
ukrsite@ukr.net
DEFAULT DIRECTORY
Home > myVMSS | Load balancing > myLoadBalancer
myLoadBalancer | Backend pools
Load balancer
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Frontend IP configuration
Backend pools
Health probes
Load balancing rules
Inbound NAT rules
Outbound rules
Properties
Locks
Monitoring
Add
Refresh
The backend pool is a critical component of the load balancer. The backend pool defines the group of resources that will serve traffic for a given load-balancing rule. Learn more.
Backend pool 'myBackEndPool' was added to Virtual machine scale set 'myVMSS'. Upgrade all the instances of 'myVMSS' for this change to work
Add filter
Backend pool
Resource Name
IP address
Network interface
Availability zone
Rules count
Resource Status
Admin state
myBackEndPool (2)
myBackEndPool myVMSS_2108d3d6 10.0.0.4 myvms189fNic-693d - 1 Running None
myBackEndPool myVMSS_3b520a91 10.0.0.5 myvms189fNic-d168 - 1 Running None
Give feedback
https://portal.azure.com/#@ukrsiteukr.onmicrosoft.com/resource/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGroups/myResourceGroup/providers/Microsoft.Network/loadBalancers/myLoadBalancer/backendP...


Модуль 5. Kubernete
Add - AnkiWeb
app.landingsite.ai/we
myVMSS - Microsoft
Azure Compute Servi
Azure Load Balancer
portal.azure.com/#@ukrsiteukr.onmicrosoft.com/resource/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGrou...
Microsoft Azure
Upgrade
Search resources, services, and docs (G+/)
Copilot
ukrsite@ukr.net
DEFAULT DIRECTORY
Home
myVMSS
Virtual machine scale set
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Instances
Networking
Network settings
Load balancing
Application security groups
Network manager
Settings
Availability + scale
Security
Operations
Monitoring
Move
Start
Restart
Stop
Hibernate
Reimage
Delete
Refresh
Feedback
Essentials
JSON View
Resource group (move) : myResourceGroup
Status : 2 out of 2 succeeded
Location : East US
Subscription (move) : Azure subscription 1
Subscription ID : bf75502e-bab2-4709-9623-046fbddb39b7
Operating system : Linux
Size : Standard_B1s (2 instances)
Public IP address : 20.185.52.250
Public IP address (IPv6) : -
Virtual network/subnet : myVNet/mySubnet
Orchestration mode : Flexible
Time created : 1/16/2025, 4:23 PM UTC
Tags (edit) : Add tags
Properties
Monitoring
Capabilities (6)
Recommendations
Tutorials
Virtual machine profile
Operating system Linux
Capacity reservation group -
Hibernation Disabled
Networking
Public IP address 20.185.52.250
Public IP address (IPv6) -
Virtual network/subnet myVNet/mySubnet
Azure Spot
Azure Spot Disabled
Size
Size Standard_B1s


untitled
Practical Task 3- Configuring an Azure Load Balancer.java
Linux VM Setup and NSG Configuration on Azure.java
untitled
untitled
87 ## **Step 2: Create a Virtual Machine Scale Set (VMSS)**
88 We will create a **Linux VMSS** with **two instances** (B1s size) and a startup script to install **Nginx**.
89
90 ```bash
91 az vmss create \
92 --resource-group myResourceGroup \
93 --name myVMSS \
94 --image Ubuntu2204 \
95 --admin-username azureuser \
96 --generate-ssh-keys \
97 --vm-sku Standard_B1s \
98 --instance-count 2 \
99 --vnet-name myVNet \
100 --subnet mySubnet \
101 --load-balancer "" \
102 --custom-data cloud-init.yaml
103 ```
Secure RDP Access
Find
Find Prev
Find All
12 lines, 298 characters selected
Spaces: 2
Java


Модуль 5. Kubernete
Add - AnkiWeb
app.landingsite.ai/we
myLoadBalancer - Mic
Azure Compute Servic
Azure Load Balancer
portal.azure.com/#@ukrsiteukr.onmicrosoft.com/resource/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGrou...
Microsoft Azure
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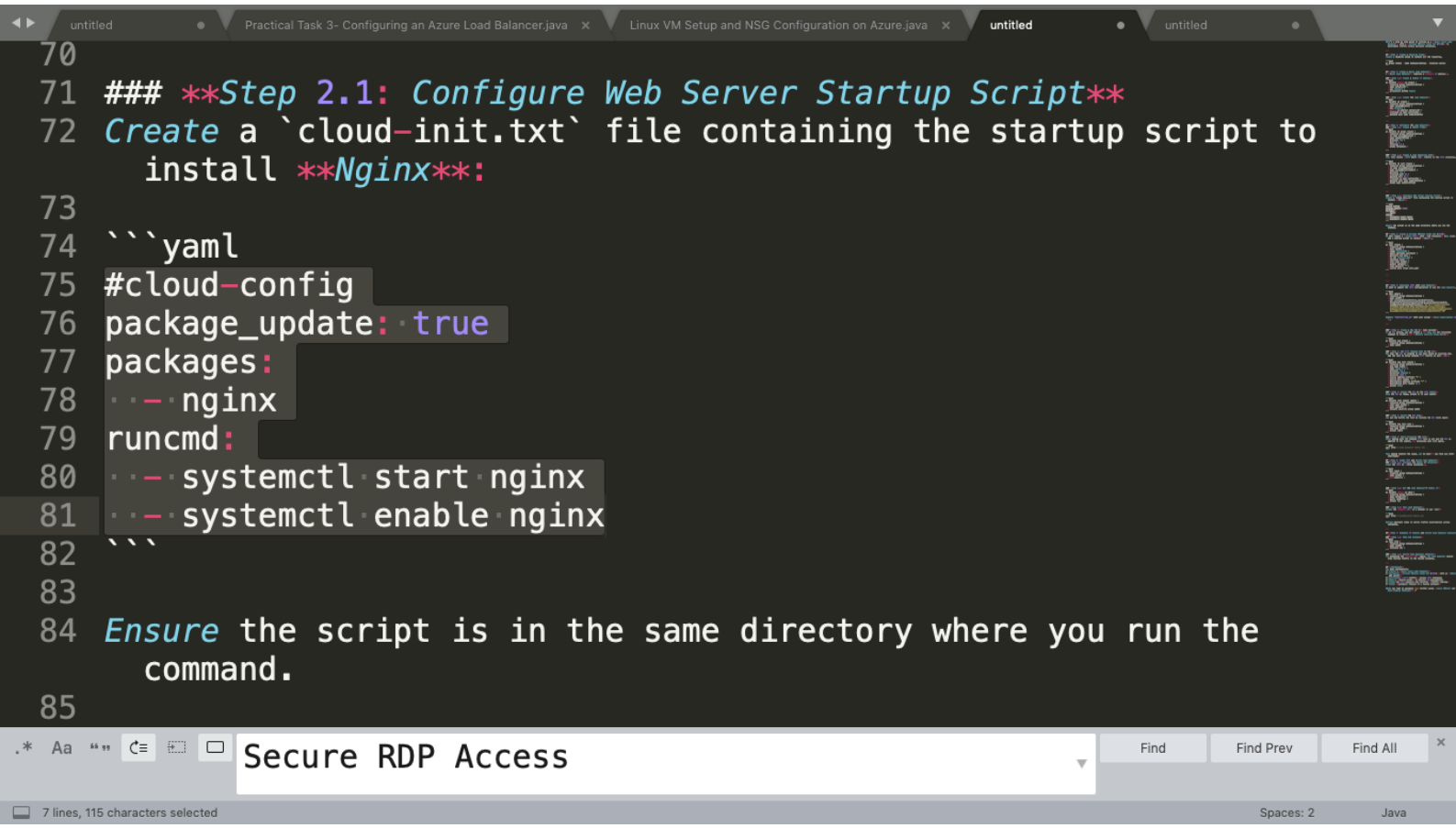
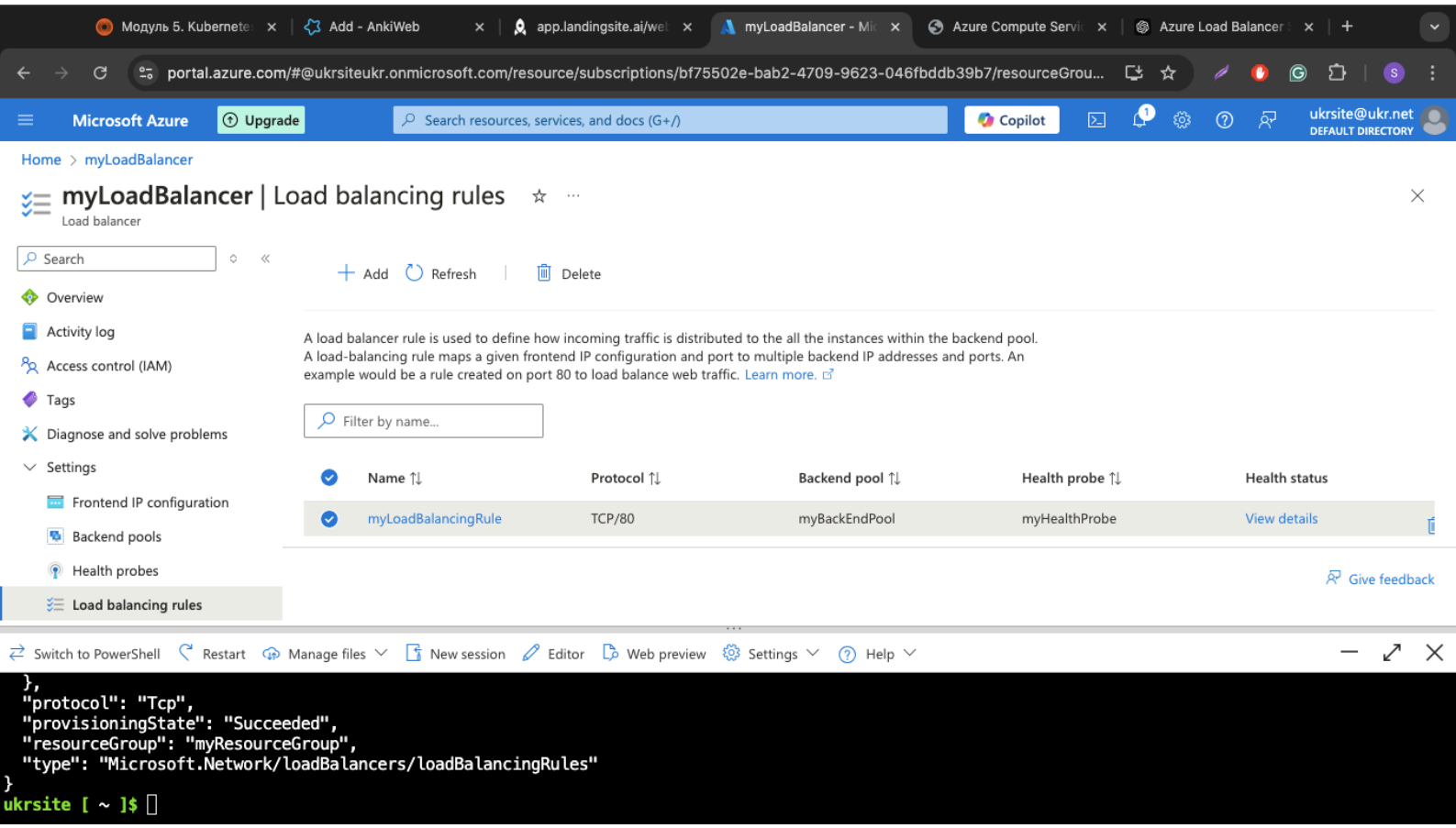
DEFAULT DIRECTORY
Switch to PowerShell
Restart
Manage files
New session
Editor
Web preview
Settings
Help
GNU nano 6.0
cloud-init.yaml
#cloud-config
package_update: true
packages:
- nginx
runcmd:
- systemctl start nginx
- systemctl enable nginx
[ Read 7 lines ]
^G Help
^O Write Out
^W Where Is
^K Cut
^T Execute
^C Location
M-U Undo
M-A Set Mark
M-] To Bracket
^X Exit
^R Read File
^\ Replace
^U Paste
^J Justify
^/ Go To Line
M-E Redo
M-6 Copy
^Q Where Was


untitled
Practical Task 3- Configuring an Azure Load Balancer.java
Linux VM Setup and NSG Configuration on Azure.java
untitled
untitled
70
71 ### **Step 2.1: Configure Web Server Startup Script**
72 Create a `cloud-init.txt` file containing the startup script to install **Nginx**:
73
74 ```yaml
75 #cloud-config
76 package_update: true
77 packages:
78 - nginx
79 runcmd:
80 - systemctl start nginx
81 - systemctl enable nginx
82 ```
83
84 Ensure the script is in the same directory where you run the command.
85
.* Aa
Secure RDP Access
Find
Find Prev
Find All
7 lines, 115 characters selected
Spaces: 2
Java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Azure Load Balancer
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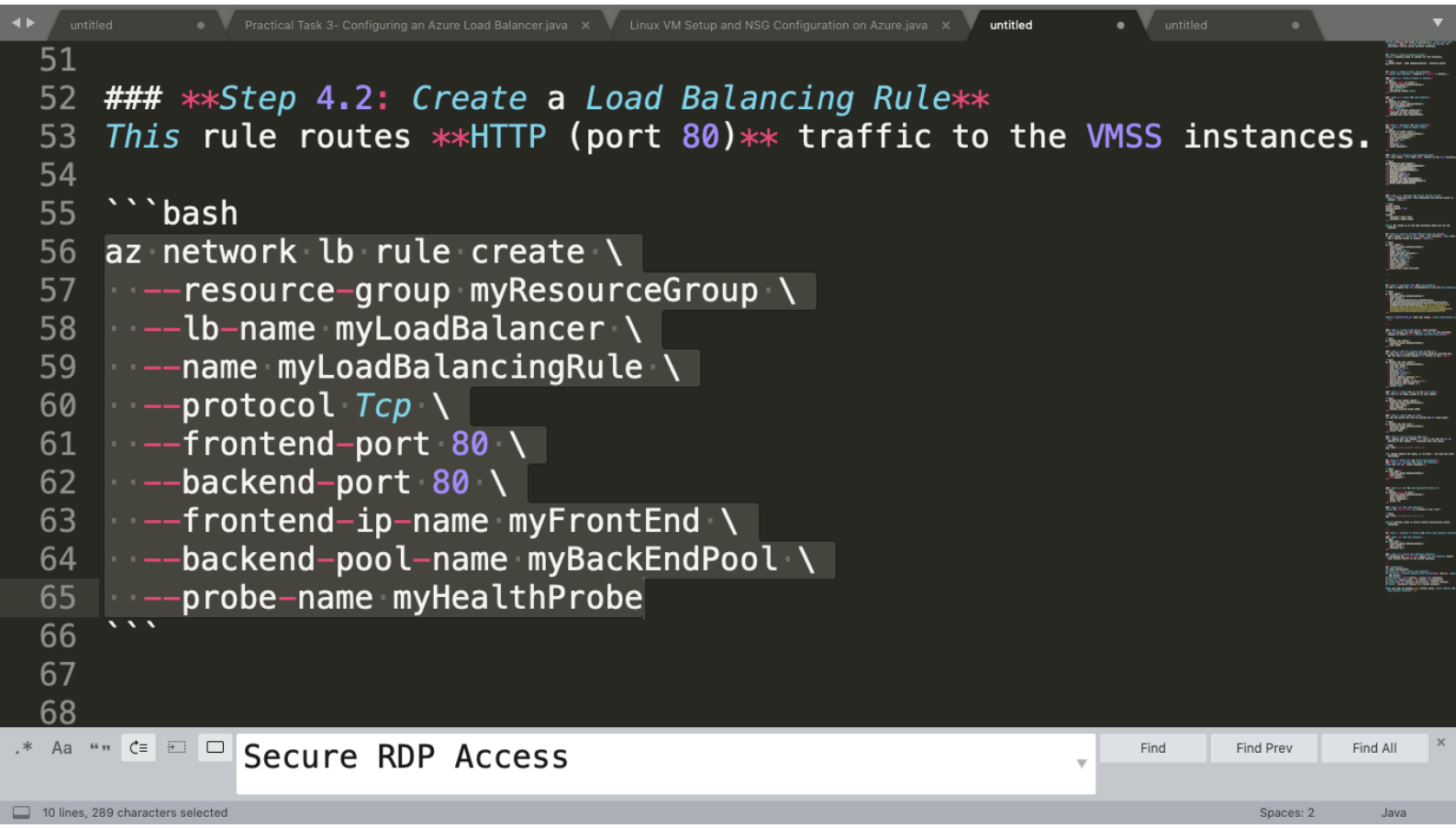
DEFAULT DIRECTORY
Home > myLoadBalancer
myLoadBalancer | Load balancing rules
Load balancer
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Frontend IP configuration
Backend pools
Health probes
Load balancing rules
Add
Refresh
Delete
A load balancer rule is used to define how incoming traffic is distributed to the all the instances within the backend pool.
A load-balancing rule maps a given frontend IP configuration and port to multiple backend IP addresses and ports. An
example would be a rule created on port 80 to load balance web traffic. Learn more.
Filter by name...
Name
Protocol
Backend pool
Health probe
Health status
myLoadBalancingRule
TCP/80
myBackEndPool
myHealthProbe
View details
Give feedback
Switch to PowerShell
Restart
Manage files
New session
Editor
Web preview
Settings
Help
},
"protocol": "Tcp",
"provisioningState": "Succeeded",
"resourceGroup": "myResourceGroup",
"type": "Microsoft.Network/loadBalancers/loadBalancingRules"
}
ukrsite [ ~ ]$


untitled
Practical Task 3- Configuring an Azure Load Balancer.java
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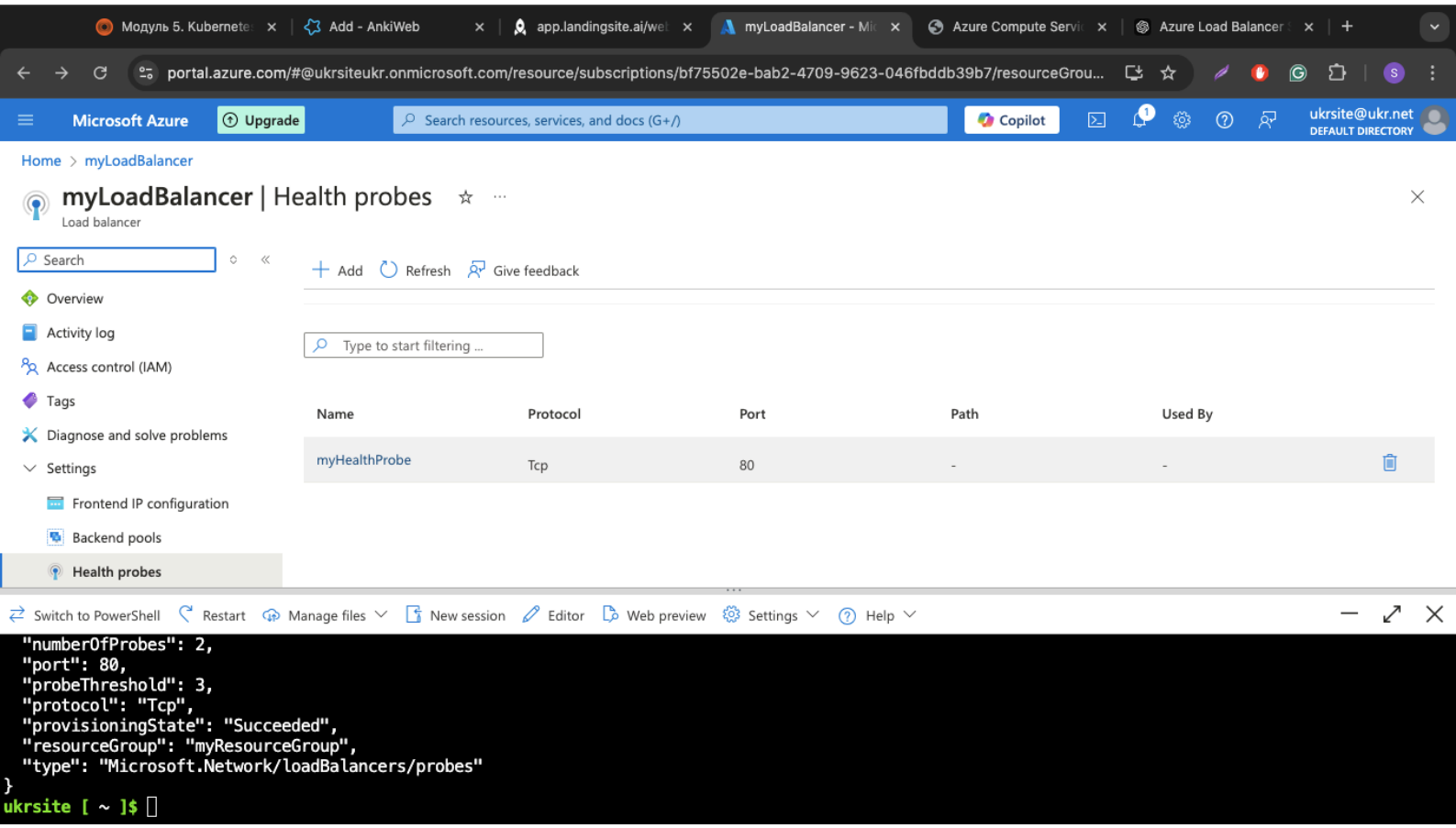
untitled
untitled
51
52 ### **Step 4.2: Create a Load Balancing Rule**
53 This rule routes **HTTP (port 80)** traffic to the VMSS instances.
54
55 ```bash
56 az network lb rule create \
57 --resource-group myResourceGroup \
58 --lb-name myLoadBalancer \
59 --name myLoadBalancingRule \
60 --protocol Tcp \
61 --frontend-port 80 \
62 --backend-port 80 \
63 --frontend-ip-name myFrontEnd \
64 --backend-pool-name myBackEndPool \
65 --probe-name myHealthProbe
66 ```
67
68
.* Aa
Secure RDP Access
Find
Find Prev
Find All
10 lines, 289 characters selected
Spaces: 2
Java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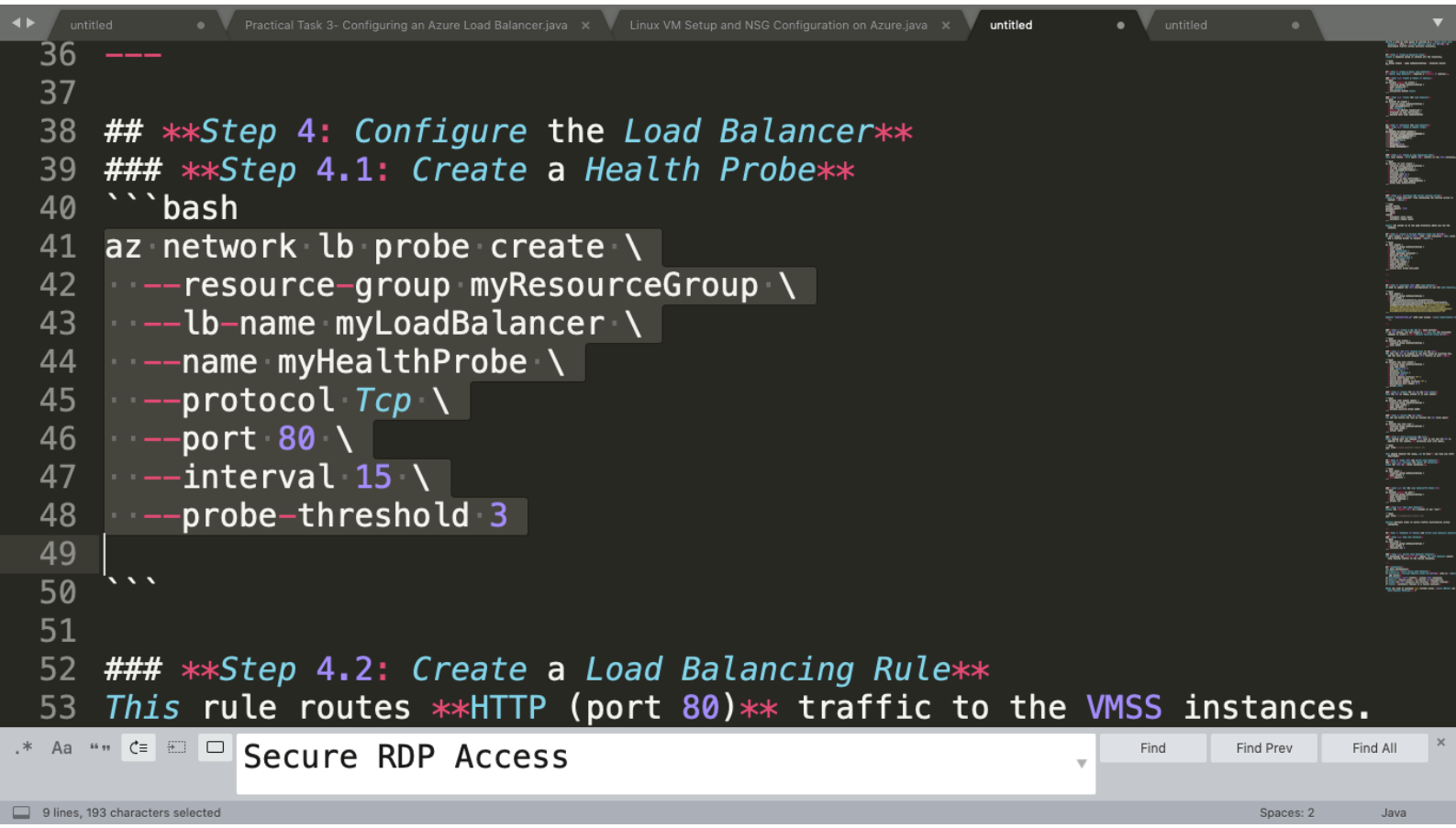
Home > myLoadBalancer
myLoadBalancer | Health probes
Load balancer
Search
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Settings
Frontend IP configuration
Backend pools
Health probes
Add
Refresh
Give feedback
Type to start filtering ...
Name
Protocol
Port
Path
Used By
myHealthProbe
Tcp
80
-
-
Switch to PowerShell
Restart
Manage files
New session
Editor
Web preview
Settings
Help
"numberOfProbes": 2,
"port": 80,
"probeThreshold": 3,
"protocol": "Tcp",
"provisioningState": "Succeeded",
"resourceGroup": "myResourceGroup",
"type": "Microsoft.Network/loadBalancers/probes"
}
ukrsite [ ~ ]$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Practical Task 3- Configuring an Azure Load Balancer.java
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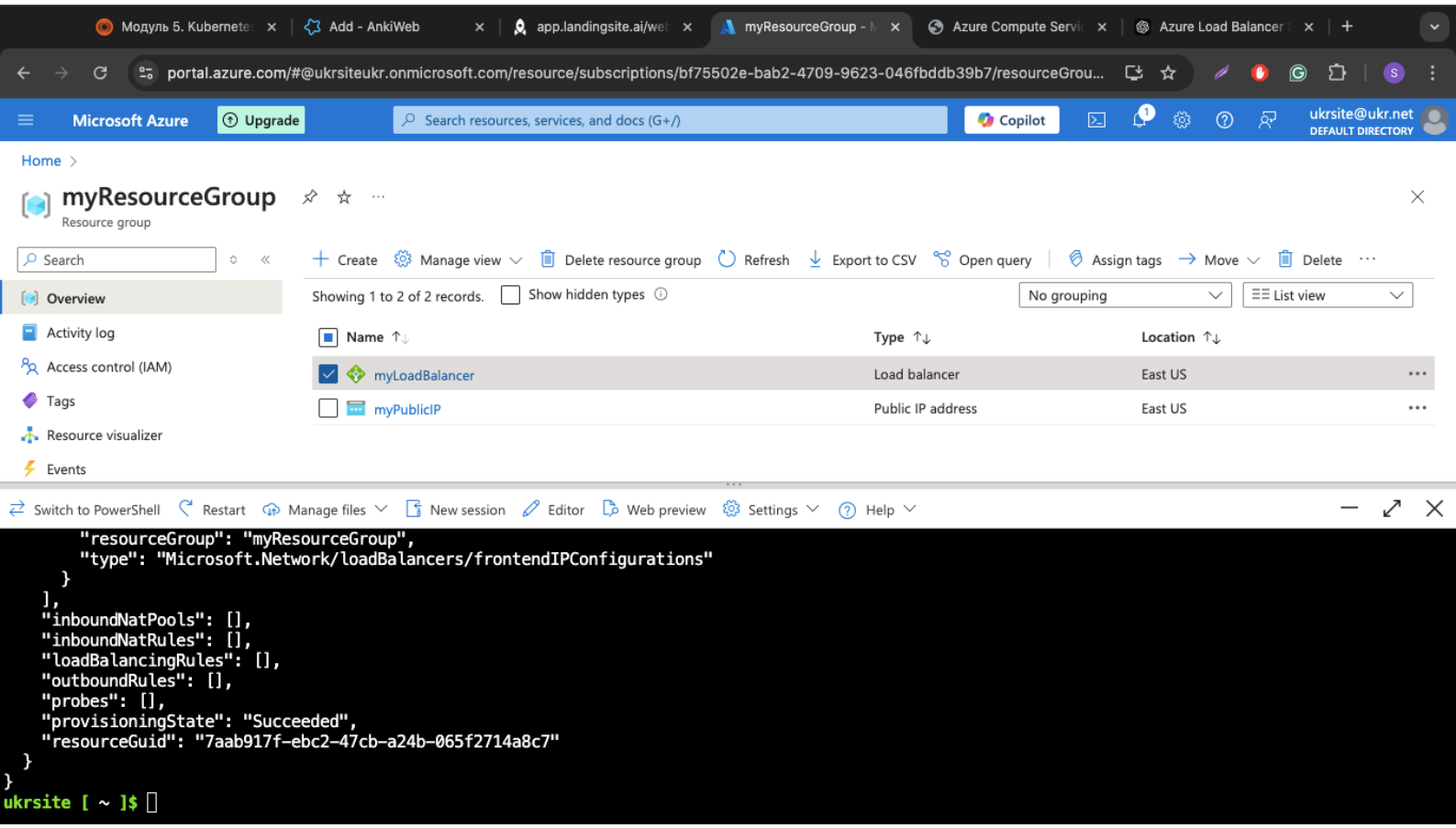
---
## **Step 4: Configure the Load Balancer**
### **Step 4.1: Create a Health Probe**
```bash
az network lb probe create \
--resource-group myResourceGroup \
--lb-name myLoadBalancer \
--name myHealthProbe \
--protocol Tcp \
--port 80 \
--interval 15 \
--probe-threshold 3
```
### **Step 4.2: Create a Load Balancing Rule**
This rule routes **HTTP (port 80)** traffic to the VMSS instances.
Secure RDP Access
Find
Find Prev
Find All
9 lines, 193 characters selected
Spaces: 2
Java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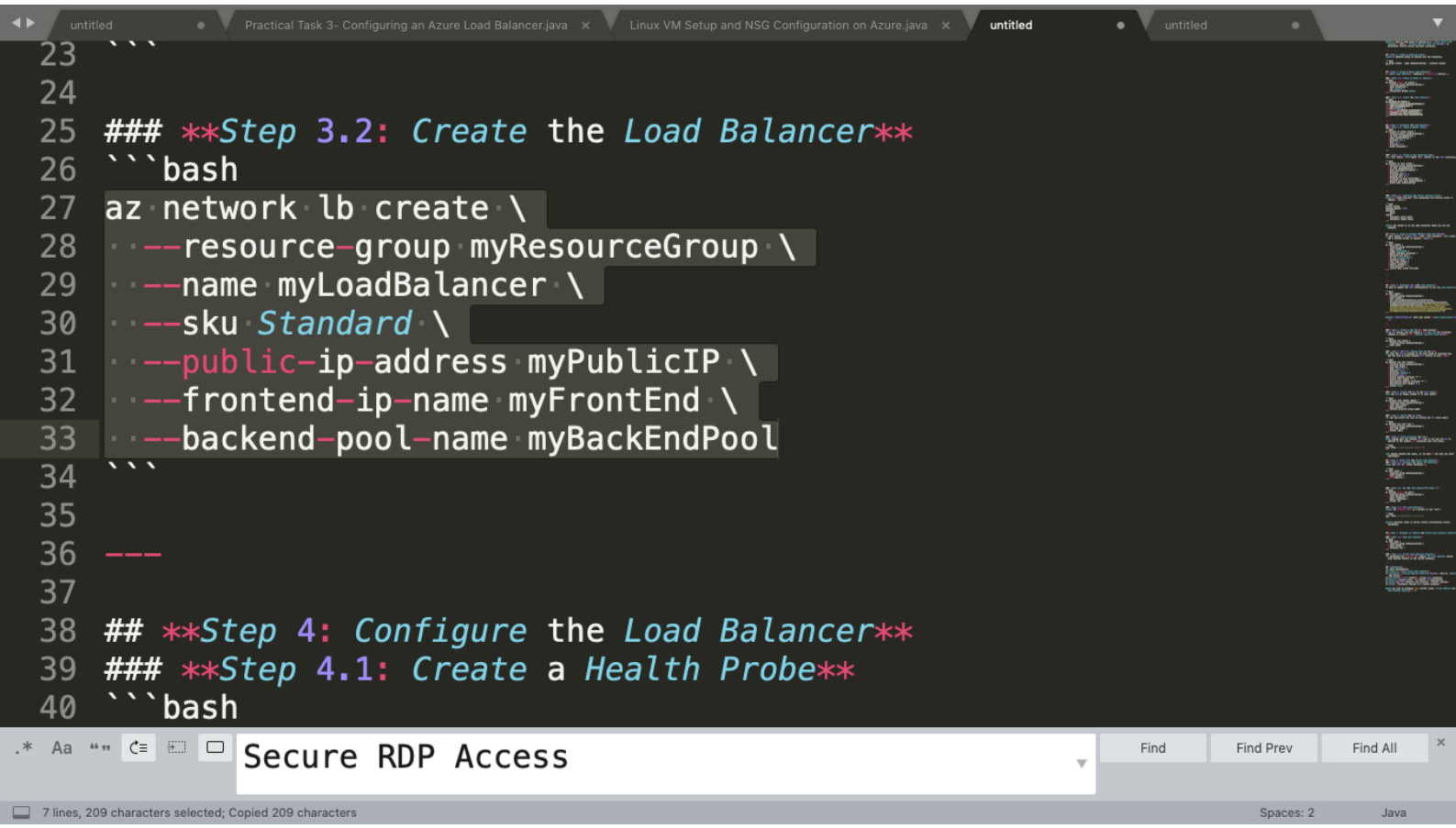
myResourceGroup
Resource group
Search
Overview
Activity log
Access control (IAM)
Tags
Resource visualizer
Events
Create
Manage view
Delete resource group
Refresh
Export to CSV
Open query
Assign tags
Move
Delete
Showing 1 to 2 of 2 records.
Show hidden types
No grouping
List view
Name
Type
Location
myLoadBalancer
Load balancer
East US
myPublicIP
Public IP address
East US
Switch to PowerShell
Restart
Manage files
New session
Editor
Web preview
Settings
Help
"resourceGroup": "myResourceGroup",
"type": "Microsoft.Network/loadBalancers/frontendIPConfigurations"
}
],
"inboundNatPools": [],
"inboundNatRules": [],
"loadBalancingRules": [],
"outboundRules": [],
"probes": [],
"provisioningState": "Succeeded",
"resourceGuid": "7aab917f-ebc2-47cb-a24b-065f2714a8c7"
}
}
ukrsite [ ~ ]$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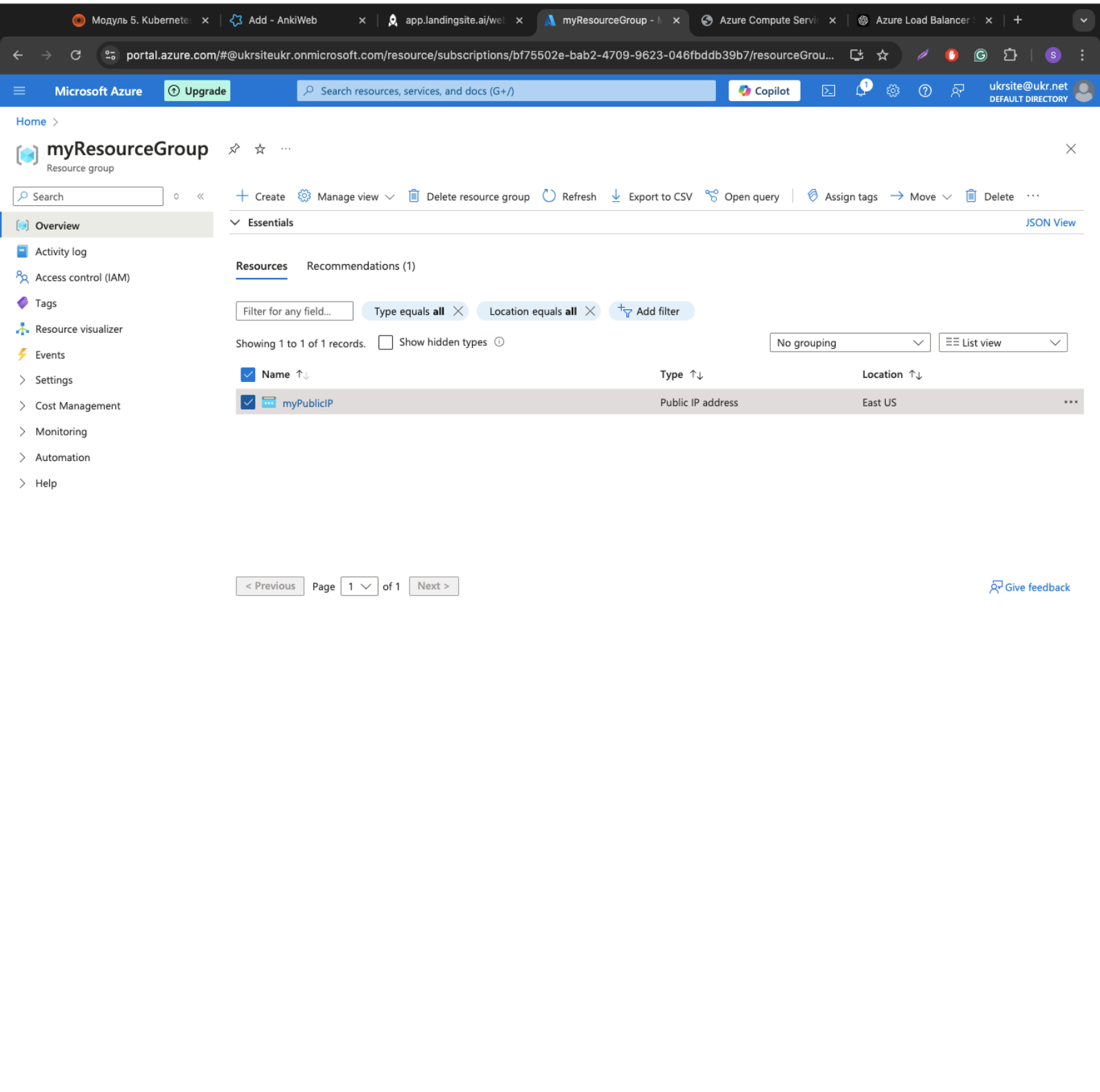
Linux VM Setup and NSG Configuration on Azure.java
untitled
untitled
```
### **Step 3.2: Create the Load Balancer**
```bash
az network lb create \
  --resource-group myResourceGroup \
  --name myLoadBalancer \
  --sku Standard \
  --public-ip-address myPublicIP \
  --frontend-ip-name myFrontEnd \
  --backend-pool-name myBackEndPool
```
---
## **Step 4: Configure the Load Balancer**
### **Step 4.1: Create a Health Probe**
```bash
Secure RDP Access
Find
Find Prev
Find All
7 lines, 209 characters selected; Copied 209 characters
Spaces: 2
Java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Add - AnkiWeb
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myResourceGroup -
Azure Compute Servi
Azure Load Balancer
portal.azure.com/#@ukrsiteukr.onmicrosoft.com/resource/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGrou...
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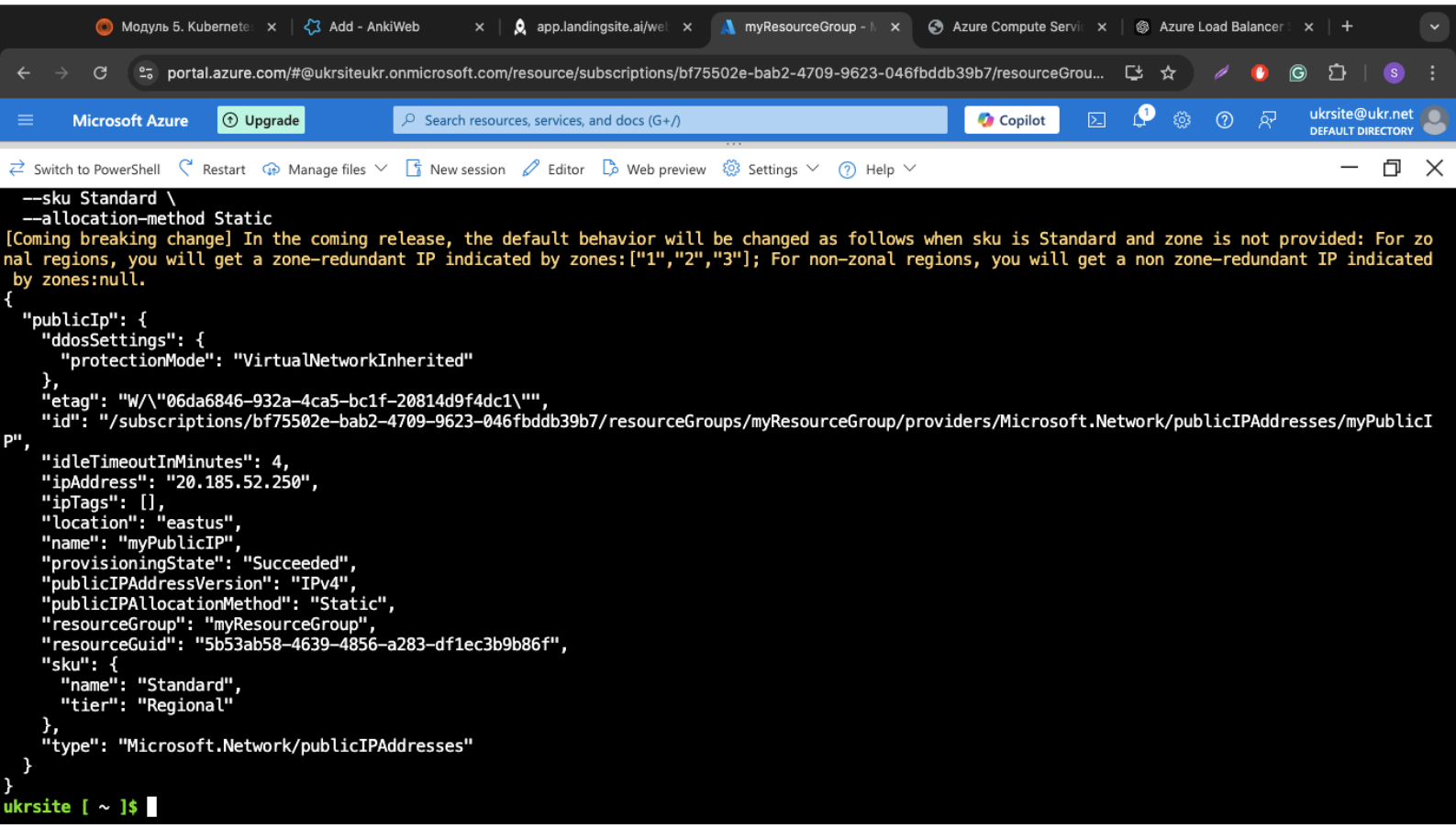
DEFAULT DIRECTORY
Home
myResourceGroup
Resource group
Search
Overview
Activity log
Access control (IAM)
Tags
Resource visualizer
Events
Settings
Cost Management
Monitoring
Automation
Help
Create
Manage view
Delete resource group
Refresh
Export to CSV
Open query
Assign tags
Move
Delete
Essentials
JSON View
Resources
Recommendations (1)
Filter for any field...
Type equals all
Location equals all
Add filter
Showing 1 to 1 of 1 records.
Show hidden types
No grouping
List view
Name
Type
Location
myPublicIP
Public IP address
East US
< Previous
Page 1 of 1
Next >
Give feedback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Add - AnkiWeb
app.landingsite.ai/we
myResourceGroup - M
Azure Compute Servic
Azure Load Balancer
portal.azure.com/#@ukrsiteukr.onmicrosoft.com/resource/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGrou...
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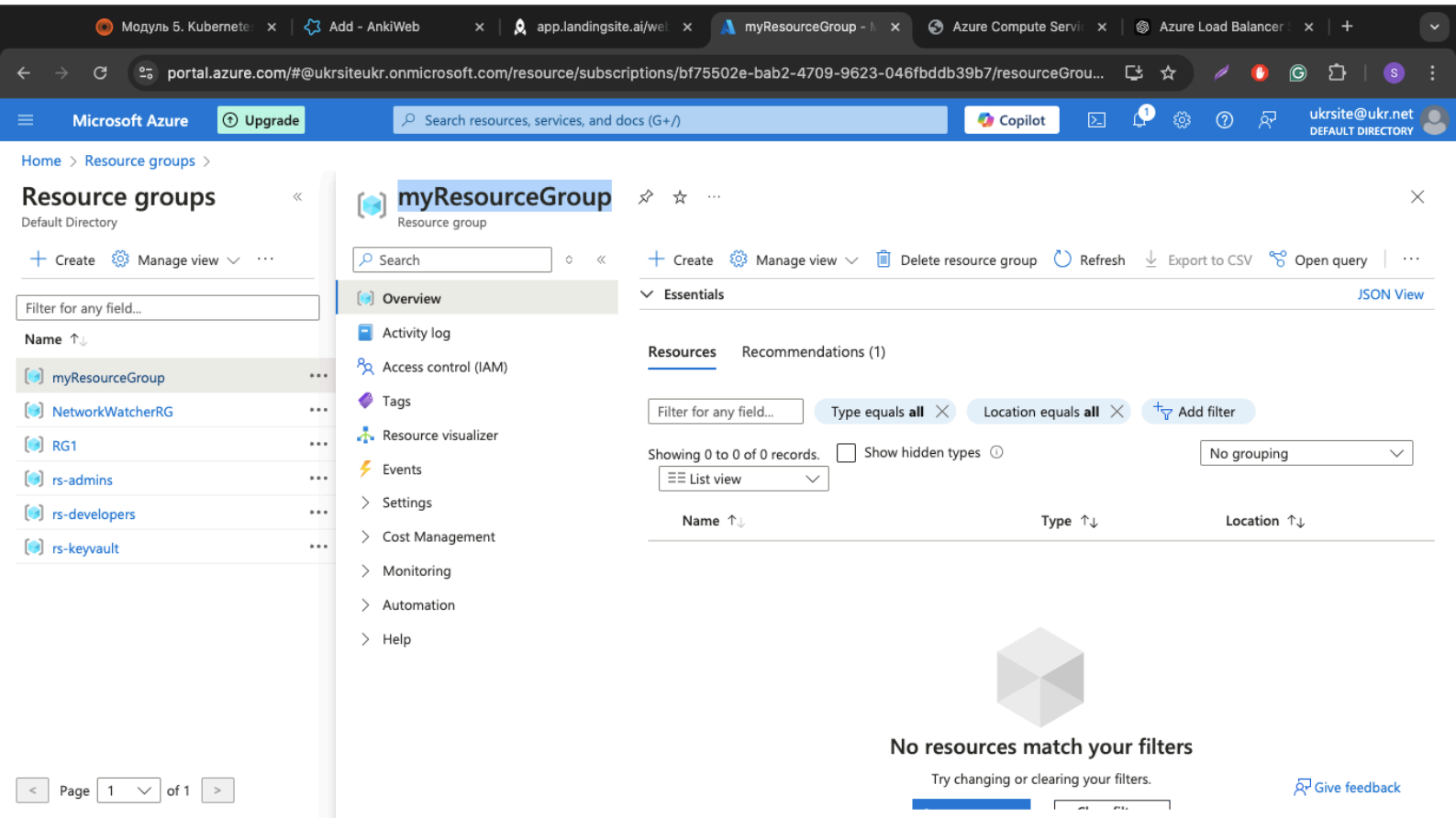
DEFAULT DIRECTORY
Switch to PowerShell
Restart
Manage files
New session
Editor
Web preview
Settings
Help
--sku Standard \
--allocation-method Static
[Coming breaking change] In the coming release, the default behavior will be changed as follows when sku is Standard and zone is not provided: For zonal regions, you will get a zone-redundant IP indicated by zones:["1","2","3"]; For non-zonal regions, you will get a non zone-redundant IP indicated by zones:null.
{
"publicIp": {
"ddosSettings": {
"protectionMode": "VirtualNetworkInherited"
},
"etag": "W/\"06da6846-932a-4ca5-bc1f-20814d9f4dc1\"",
"id": "/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGroups/myResourceGroup/providers/Microsoft.Network/publicIPAddresses/myPublicIP",
"idleTimeoutInMinutes": 4,
"ipAddress": "20.185.52.250",
"ipTags": [],
"location": "eastus",
"name": "myPublicIP",
"provisioningState": "Succeeded",
"publicIPAddressVersion": "IPv4",
"publicIPAllocationMethod": "Static",
"resourceGroup": "myResourceGroup",
"resourceGuid": "5b53ab58-4639-4856-a283-df1ec3b9b86f",
"sku": {
"name": "Standard",
"tier": "Regional"
},
"type": "Microsoft.Network/publicIPAddresses"
}
}
ukrsite [ ~ ]$


Модуль 5. Kubernete
Add - AnkiWeb
app.landingsite.ai/we
myResourceGroup - M
Azure Compute Servi
Azure Load Balancer
portal.azure.com/#@ukrsiteukr.onmicrosoft.com/resource/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGrou...
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Upgrade
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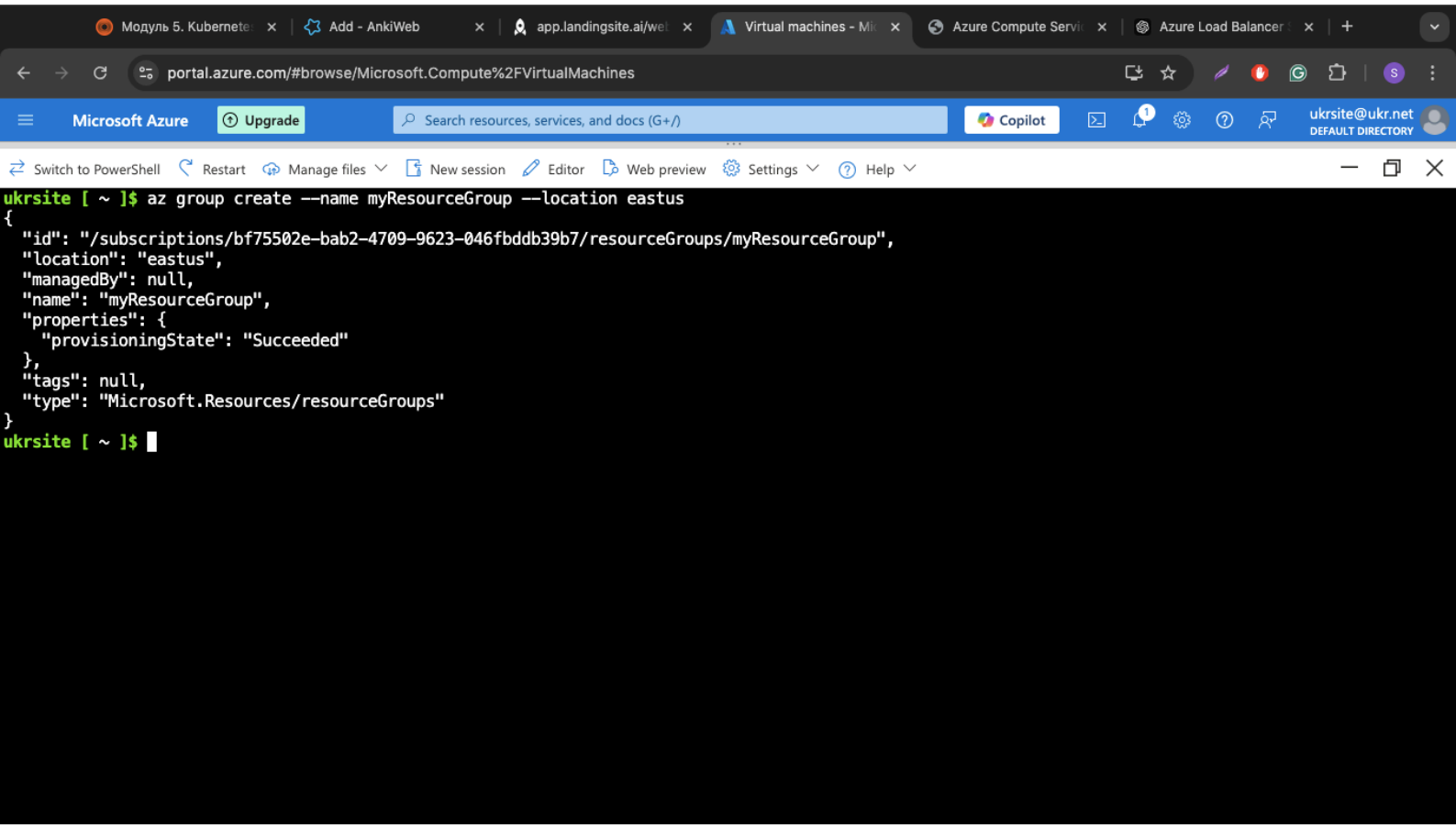
Copilot
ukrsite@ukr.net
DEFAULT DIRECTORY
Home > Resource groups >
Resource groups
Default Directory
Create
Manage view
Filter for any field...
Name
myResourceGroup
NetworkWatcherRG
RG1
rs-admins
rs-developers
rs-keyvault
Page 1 of 1
myResourceGroup
Resource group
Search
Overview
Activity log
Access control (IAM)
Tags
Resource visualizer
Events
Settings
Cost Management
Monitoring
Automation
Help
Create
Manage view
Delete resource group
Refresh
Export to CSV
Open query
Essentials
JSON View
Resources
Recommendations (1)
Filter for any field...
Type equals all
Location equals all
Add filter
Showing 0 to 0 of 0 records.
Show hidden types
No grouping
List view
Name
Type
Location
No resources match your filters
Try changing or clearing your filters.
Give feedback


Модуль 5. Kubernete
Add - AnkiWeb
app.landingsite.ai/we
Virtual machines - Mi
Azure Compute Servi
Azure Load Balancer
portal.azure.com/#browse/Microsoft.Compute%2FVirtualMachines
Microsoft Azure
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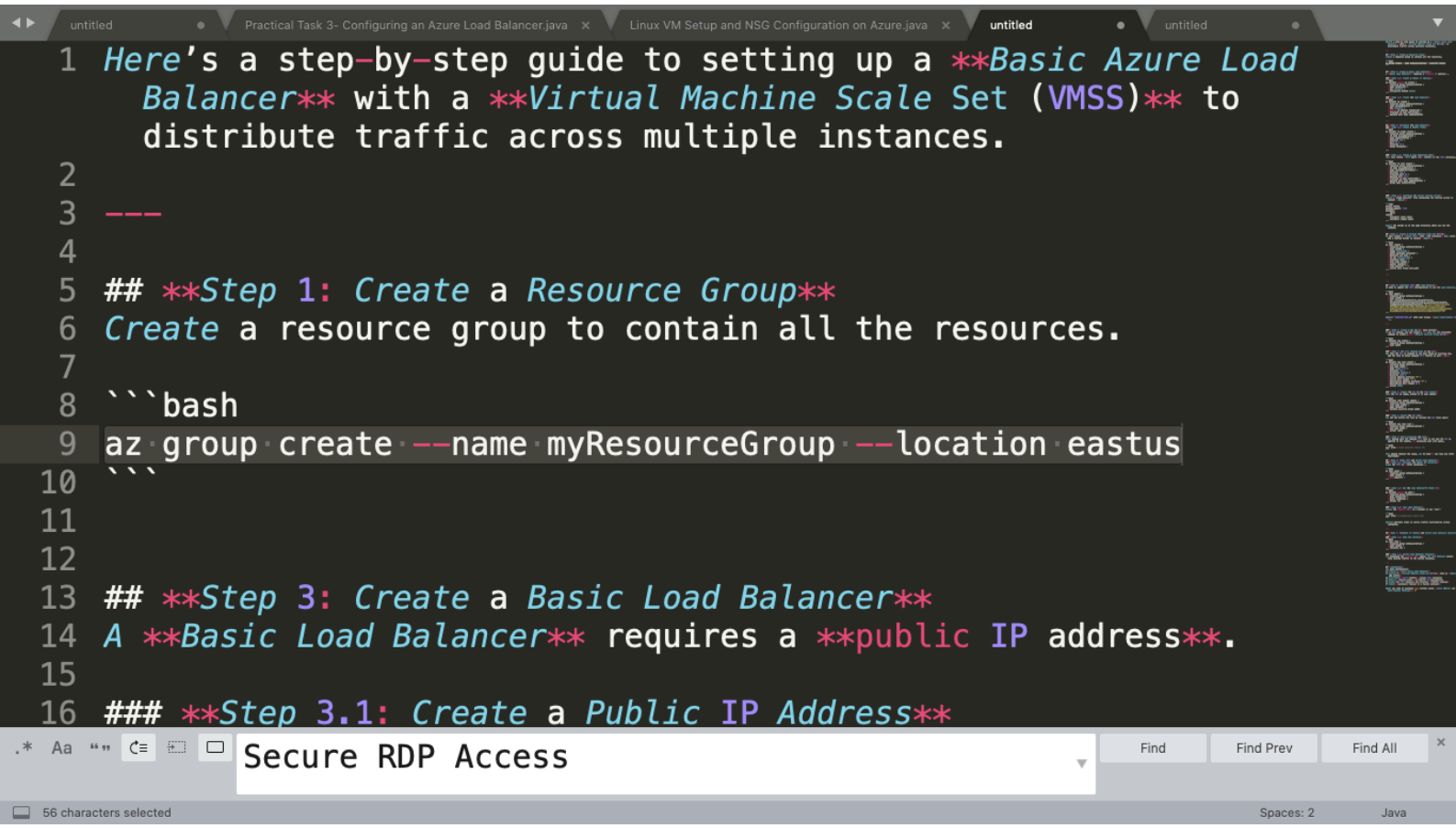
Copilot
ukrsite@ukr.net
DEFAULT DIRECTORY
Switch to PowerShell
Restart
Manage files
New session
Editor
Web preview
Settings
Help
ukrsite [ ~ ]$ az group create --name myResourceGroup --location eastus
{
"id": "/subscriptions/bf75502e-bab2-4709-9623-046fbddb39b7/resourceGroups/myResourceGroup",
"location": "eastus",
"managedBy": null,
"name": "myResourceGroup",
"properties": {
"provisioningState": "Succeeded"
},
"tags": null,
"type": "Microsoft.Resources/resourceGroups"
}
ukrsite [ ~ ]$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Practical Task 3- Configuring an Azure Load Balancer.java
Linux VM Setup and NSG Configuration on Azure.java
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untitled
Here's a step-by-step guide to setting up a **Basic Azure Load Balancer** with a **Virtual Machine Scale Set (VMSS)** to distribute traffic across multiple instances.
---
## **Step 1: Create a Resource Group**
Create a resource group to contain all the resources.
```bash
az group create --name myResourceGroup --location eastus
```
## **Step 3: Create a Basic Load Balancer**
A **Basic Load Balancer** requires a **public IP address**.
### **Step 3.1: Create a Public IP Address**
Secure RDP Access
Find
Find Prev
Find All
56 characters selected
Spaces: 2
Java

6. Verify that the Load Balancer removes unavailable VM from the traffic pool when it fails the health probe.

**Practical Task 4: Configuring a Basic Load Balancer with Virtual Machine Scale Sets (VMSS)**

Set up a **Basic Azure Load Balancer** to distribute traffic across a Virtual Machine Scale Set (VMSS).

**Requirements:**

1. Create a Virtual Machine Scale Set (VMSS) in Azure using Linux or Windows instances within the free tier (for example **B1s size**). Limit the scale set to two VM instances to avoid exceeding the free-tier 750-hour limit.
2. Deploy the scale set with a custom configuration to install and configure a web server (e.g., Nginx on Linux or IIS on Windows) on each VM instance.
3. Configure the **Basic Load Balancer** to distribute HTTP (port 80) traffic across the VM instances in the scale set.
4. Add a health probe to monitor the availability of instances in the VMSS.
5. Scale the VMSS manually by increasing the number of instances to verify the Load Balancer routes traffic to the newly added VMs.
6. Test the setup by accessing the Load Balancer's public IP address and verifying traffic distribution across multiple VM instances.
7. Verify that the Load Balancer removes an unavailable instance from the traffic pool when it fails the health probe.

**Practical Task 5: Deploying a Web Application Using Azure App Services**

Set up and deploy a simple web application using **Azure App Services**.