Task 4: Scale containerized workloads in the Azure Kubernetes service cluster

In this task, you will scale horizontally the number of pods and then number of cluster nodes.

run the following to scale the deployment by increasing of the number of pods to 2:

- kubectl scale --replicas=2 deployment/nginx-deployment

```
Bash
         andrej [ ~ ]$ kubectl scale --replicas=2 deployment/nginx-deployment
deployment.apps/nginx-deployment scaled
andrej [ ~ ]$ kubectl get pods
                                  READY
                                          STATUS
                                                   RESTARTS
                                                              AGE
                                                                         Terminal container button
nginx-deployment-85c6d5f6dd-6bnqs
                                  1/1
                                          Running
                                                   0
                                                              4m43s
nginx-deployment-85c6d5f6dd-wrqbz
                                  1/1
                                          Running
                                                   0
                                                              19s
andrej [ ~ 1$
```

run the following to verify the outcome of scaling the deployment:

kubectl get pods

```
Bash
         ✓ □ ? ※ □ □ ()
andrej [ ~ ]$ kubectl get nodes
                                   STATUS
                                            ROLES
                                                   AGE
                                                           VERSION
aks-agentpool-31767509-vmss000000
                                   Ready
                                                   17m
                                                           v1.24.10
                                            agent
aks-agentpool-31767509-vmss000001
                                   Ready
                                                   3m36s
                                                           v1.24.10
                                            agent
andrej [ ~ ]$
```

run the following to scale the deployment:

- kubectl scale --replicas=10 deployment/nginx-deployment run the following to verify the outcome of scaling the deployment:
 - kubectl get pods

```
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Bash
              (1)
                                     Cò
aks-agentpool-31767509-vmss000001
                                     Ready
                                                       3m36s
                                                               v1.24.10
                                               agent
andrej [ ~ ] $ kubectl scale --replicas=10 deployment/nginx-deployment
deployment.apps/nginx-deployment scaled
andrej [ ~ ]$ kubectl get pods
                                              STATUS
                                     READY
                                                        RESTARTS
                                                                   AGE
nginx-deployment-85c6d5f6dd-5r8k4
                                     1/1
                                              Running
                                                        0
                                                                    14s
nginx-deployment-85c6d5f6dd-6bnqs
                                     1/1
                                              Running
                                                        0
                                                                    13m
nginx-deployment-85c6d5f6dd-grw91
                                     1/1
                                             Running
                                                        0
                                                                    14s
nginx-deployment-85c6d5f6dd-j2p4d
                                     1/1
                                              Running
                                                        0
                                                                    Terminal container button
nginx-deployment-85c6d5f6dd-jhkjl
                                     1/1
                                              Running
                                                        0
nginx-deployment-85c6d5f6dd-mtrcx
                                              Running
                                                                    15s
                                     1/1
                                                        0
nginx-deployment-85c6d5f6dd-snp5r
                                             Running
                                     1/1
                                                        0
                                                                    15s
nginx-deployment-85c6d5f6dd-vtpj4
                                              Running
                                     1/1
                                                        0
                                                                    14s
nginx-deployment-85c6d5f6dd-wrqbz
                                              Running
                                     1/1
                                                        0
                                                                    9m5s
nginx-deployment-85c6d5f6dd-x6wrf
                                     1/1
                                              Running
                                                        0
                                                                    15s
andrej [ ~ ]$ |
```

run the following to review the pods distribution across cluster nodes:

kubectl get pod -o=custom-columns=NODE:.spec.nodeName,POD:.metadata.name

```
andrej [ ~ ]$ kubectl get pod -o=custom-columns=NODE:.spec.nodeName,POD:.metadata.name
aks-agentpool-31767509-vmss000000
                                    nginx-deployment-85c6d5f6dd-5r8k4
aks-agentpool-31767509-vmss000000
                                    nginx-deployment-85c6d5f6dd-6bnqs
aks-agentpool-31767509-vmss000001
                                    nginx-deployment-85c6d5f6dd-grw91
aks-agentpool-31767509-vmss000001
                                    nginx-deployment-85c6d5f6dd-j2p4d
aks-agentpool-31767509-vmss000000
                                    nginx-deployment-85c6d5f6dd-jhkjl
aks-agentpool-31767509-vmss000001
                                    nginx-deployment-85c6d5f6dd-mtrcx
aks-agentpool-31767509-vmss000001
                                    nginx-deployment-85c6d5f6dd-snp5r
aks-agentpool-31767509-vmss000000
                                    nginx-deployment-85c6d5f6dd-vtpj4
aks-agentpool-31767509-vmss000000
                                    nginx-deployment-85c6d5f6dd-wrqbz
aks-agentpool-31767509-vmss000001
                                    nginx-deployment-85c6d5f6dd-x6wrf
andrej [ ~ ]$
```