

# LAB 1

Q 1:

```
salmamyoussef@salmamyoussef-Satellite-C55-B:~$ kubectl get pods
No resources found in default namespace.
salmamyoussef@salmamyoussef-Satellite-C55-B:~$
```

Q2:

```
salmamyoussef@salmamyoussef-Satellite-C55-B:~$ kubectl get nodes
NAME             STATUS    ROLES    AGE    VERSION
minikube         Ready     control-plane  2d17h  v1.25.3
salmamyoussef@salmamyoussef-Satellite-C55-B:~$ kubectl get pods
```

Q3:

```
salmamyoussef@salmamyoussef-Satellite-C55-B:~$ kubectl run nginx --image=nginx --restart=Never
pod/nginx created
salmamyoussef@salmamyoussef-Satellite-C55-B:~$
```

Q4:

```
salmamyoussef@salmamyoussef-Satellite-C55-B:~$ kubectl describe pod nginx
Name:          nginx
Namespace:     default
Priority:       0
Service Account: default
Node:          minikube/192.168.59.100
Start Time:    Sat, 21 Jan 2023 13:43:20 +0200
Labels:        run=nginx
Annotations:    <none>
Status:        Running
IP:            172.17.0.3
IPs:
  IP: 172.17.0.3
Containers:
  nginx:
    Container ID:  docker://37bb2bad25bbaf747c5feb21d3dc78e02e3c7defcccb495d4f948435a96da9ab
    Image:         nginx
    Image ID:      docker-pullable://nginx@sha256:b8f2383a95879e1ae064940d9a200f67a6c79e710ed82ac42263397367e7cc4e
```

Q5:

```
salmamyoussef@salmamyoussef-Satellite-C55-B:~/Documents/ITI-devops/Kubernetes/lab1$ kubectl apply -f ./webapp.yaml
pod/webapp created
salmamyoussef@salmamyoussef-Satellite-C55-B:~/Documents/ITI-devops/Kubernetes/lab1$
```

Q6:

2 containers: nginx container and agentx container.

```
Containers:
  nginx:
    Container ID:   docker://8918071f48d529b6d3367c05ed9d22fe128b4fbbad5b50aa2dac0c0a3e936232
    Image:          nginx
    Image ID:       docker-pullable://nginx@sha256:b8f2383a95879e1ae064940d9a200f67a6c79e710ed82ac42263397367e7cc4e
    Port:           <none>
    Host Port:      <none>
    State:          Running
      Started:      Sat, 21 Jan 2023 13:58:01 +0200
    Ready:          True
    Restart Count:   0
    Environment:    <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-gfp8q (ro)
  agentx:
    Container ID:   agentx
    Image:           agentx
    Image ID:        <none>
    Port:            <none>
    Host Port:       <none>
    State:           Waiting
      Reason:        ImagePullBackOff
```

Q7:

images: nginx, agentx

```
Containers:
  nginx:
    Container ID:   docker://8918071f48d529b6d3367c05ed9d22fe128b4fbbad5b50aa2dac0c0a3e936232
    Image:          nginx
    Image ID:       docker-pullable://nginx@sha256:b8f2383a95879e1ae064940d9a200f67a6c79e710ed82ac42263397367e7cc4e
    Port:           <none>
    Host Port:      <none>
    State:          Running
      Started:      Sat, 21 Jan 2023 13:58:01 +0200
    Ready:          True
    Restart Count:   0
    Environment:    <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-gfp8q (ro)
  agentx:
    Container ID:   agentx
    Image:           agentx
    Image ID:        <none>
    Port:            <none>
    Host Port:       <none>
    State:           Waiting
      Reason:        ImagePullBackOff
```

Q8:

```
agentx:
  Container ID:   agentx
  Image:          agentx
  Image ID:       <none>
  Port:           <none>
  Host Port:      <none>
  State:          Waiting
    Reason:       ImagePullBackOff
  Ready:          False
  Restart Count:   0
  Environment:    <none>
  Mounts:
    /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-gfp8q (ro)
```

Q9:

```
Warning Failed 105s (x4 over 2m59s) kubelet Error: ImagePullBackOff
Normal Pulling 90s (x4 over 3m7s) kubelet Pulling image "agentx"
Warning Failed 88s (x4 over 2m59s) kubelet Failed to pull image "agentx": rpc error: code = Unknown desc = Error response
from daemon: pull access denied for agentx, repository does not exist or may require 'docker login': denied: requested access to the resource
is denied
```

Q10:

```
salmayoussef@salmayoussef-Satellite-C55-B: ~/Documents/ITI-devops/Kubernetes/lab1$ kubectl delete pod webapp
pod "webapp" deleted
salmayoussef@salmayoussef-Satellite-C55-B: ~/Documents/ITI-devops/Kubernetes/lab1$
```

Q11:

```
salmayoussef@salmayoussef-Satellite-C55-B: ~/Documents/ITI-devops/Kubernetes/lab1$ kubectl run redis --image=redis123
pod/redis created
salmayoussef@salmayoussef-Satellite-C55-B: ~/Documents/ITI-devops/Kubernetes/lab1$
```

Q12:

```
salmayoussef@salmayoussef-Satellite-C55-B: ~
# Please edit the object below. Lines beginning with a '#' will be ignored,
# and an empty file will abort the edit. If an error occurs while saving this file will be
# reopened with the relevant failures.
#
apiVersion: v1
kind: Pod
metadata:
  creationTimestamp: "2023-01-21T12:19:11Z"
  labels:
    run: redis
  name: redis
  namespace: default
  resourceVersion: "122296"
  uid: 08f69af1-c46a-4550-a387-0df3c9812edb
spec:
  containers:
  - image: redis
    imagePullPolicy: Always
    name: redis
    resources: {}
    terminationMessagePath: /dev/termination-log
    terminationMessagePolicy: File
    volumeMounts:
"/tmp/kubectl-edit-1783734083.yaml" 102 lines, 2753 bytes
```

```
salmayoussef@salmayoussef-Satellite-C55-B:~$ kubectl get pods redis
NAME    READY   STATUS    RESTARTS   AGE
redis   1/1     Running   0           30m
salmayoussef@salmayoussef-Satellite-C55-B:~$
```

Q13:

```
salmayoussef@salmayoussef-Satellite-C55-B:~$ kubectl run my-pod --image=nginx:alpine
pod/my-pod created
salmayoussef@salmayoussef-Satellite-C55-B:~$
```

Q14: