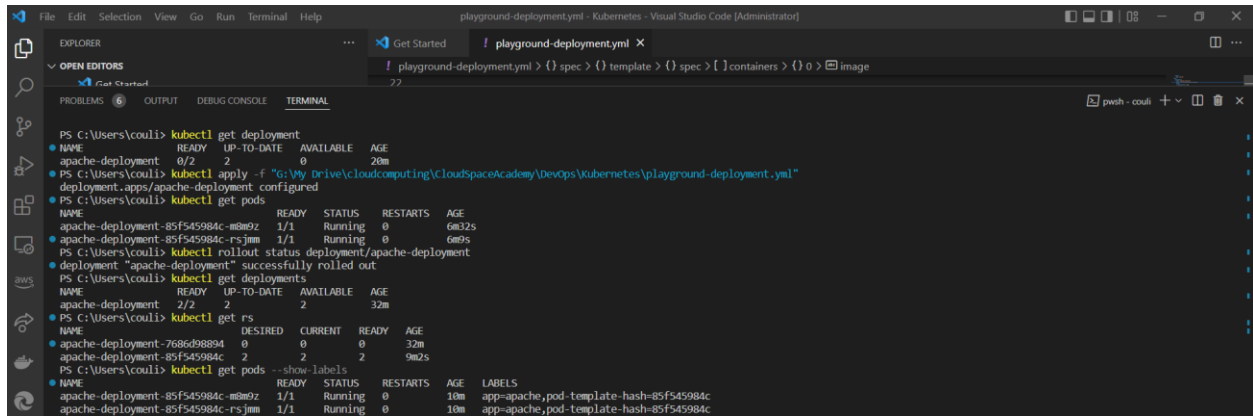
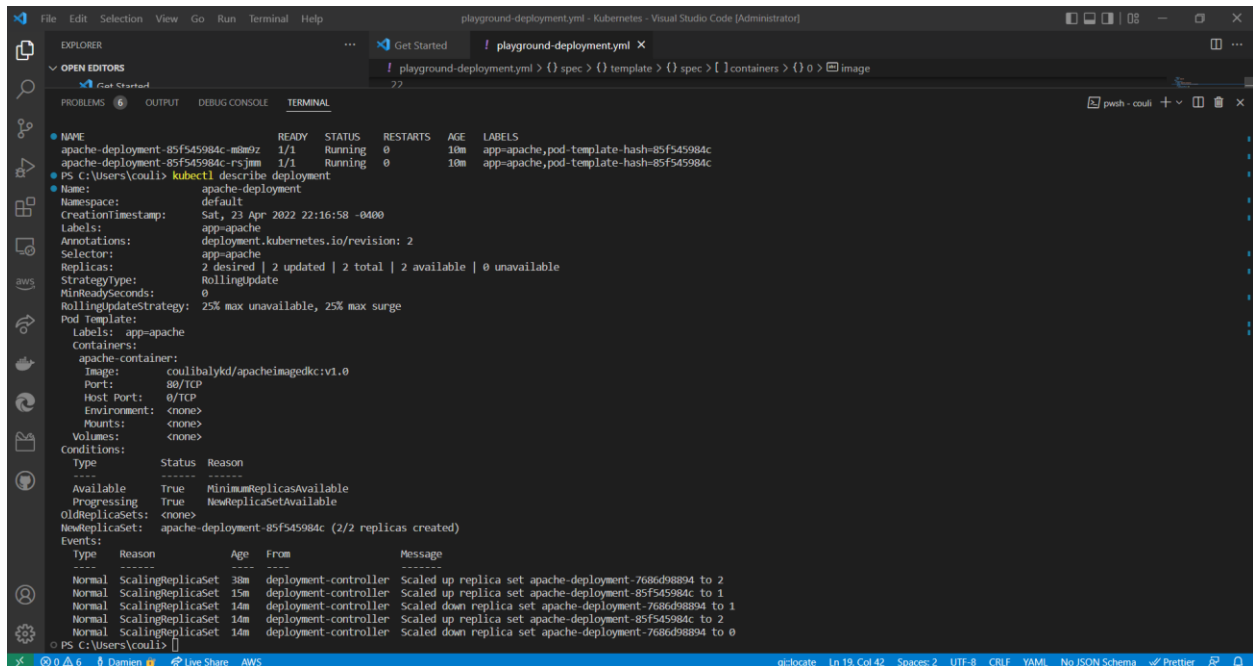


Deployment Screenshots



```
PS C:\Users\couli> kubectl get deployment
NAME                READY   UP-TO-DATE   AVAILABLE   AGE
apache-deployment   0/2     2             0            20m
PS C:\Users\couli> kubectl apply -f "G:\My Drive\cloudcomputing\CloudSpaceAcademy\DevOps\Kubernetes\playground-deployment.yml"
deployment.apps/apache-deployment configured
PS C:\Users\couli> kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
apache-deployment-85f545984c-m8m9z  1/1     Running   0           6m32s
apache-deployment-85f545984c-rsjmm  1/1     Running   0           6m0s
PS C:\Users\couli> kubectl rollout status deployment/apache-deployment
deployment "apache-deployment" successfully rolled out
PS C:\Users\couli> kubectl get deployments
NAME                READY   UP-TO-DATE   AVAILABLE   AGE
apache-deployment   2/2     2             2            32m
PS C:\Users\couli> kubectl get rs
NAME                DESIRED   CURRENT   READY   AGE
apache-deployment-7686d98894  0         0         0        32m
apache-deployment-85f545984c  2         2         2        9m2s
PS C:\Users\couli> kubectl get pods --show-labels
NAME                                READY   STATUS    RESTARTS   AGE   LABELS
apache-deployment-85f545984c-m8m9z  1/1     Running   0           10m   app=apache,pod-template-hash=85f545984c
apache-deployment-85f545984c-rsjmm  1/1     Running   0           10m   app=apache,pod-template-hash=85f545984c
```



```
PS C:\Users\couli> kubectl describe deployment
Name:         apache-deployment
Namespace:    default
CreationTimestamp: Sat, 23 Apr 2022 22:16:58 -0400
Labels:       app=apache
Annotations:  deployment.kubernetes.io/revision: 2
Selector:     app=apache
Replicas:    2 desired | 2 updated | 2 total | 2 available | 0 unavailable
StrategyType: RollingUpdate
MinReadySeconds: 0
RollingUpdateStrategy: 25% max unavailable, 25% max surge
Pod Template:
  Labels:  app=apache
  Containers:
    apache-container:
      Image:   coulibalykd/apacheimagetec:v1.0
      Port:   80/TCP
      Host Port: 80/TCP
      Environment: <none>
      Mounts: <none>
      Volumes: <none>
  Conditions:
    Type           Status  Reason
    ----           -
    Available       True    MinimumReplicasAvailable
    Progressing     True    NewReplicaSetAvailable
    OldReplicaSets: <none>
    NewReplicaSet:  apache-deployment-85f545984c (2/2 replicas created)
  Events:
    Type     Reason      Age    From          Message
    ----     -
    Normal   ScalingReplicaSet   38m    deployment-controller   Scaled up replica set apache-deployment-7686d98894 to 2
    Normal   ScalingReplicaSet   15m    deployment-controller   Scaled up replica set apache-deployment-85f545984c to 1
    Normal   ScalingReplicaSet   14m    deployment-controller   Scaled down replica set apache-deployment-7686d98894 to 1
    Normal   ScalingReplicaSet   14m    deployment-controller   Scaled up replica set apache-deployment-85f545984c to 2
    Normal   ScalingReplicaSet   14m    deployment-controller   Scaled down replica set apache-deployment-7686d98894 to 0
```

```
playground-loadbalancer.yml > {} spec > {} ports > {} 0 > {} protocol
```

```
1 apiVersion: v1
2 kind: Service
3 metadata:
4   name: apache-loadbalancer
5 spec:
6   type: LoadBalancer
7   selector:
8     app: apache
9   ports:
10     - protocol: TCP
11       port: 80
12       targetPort: 80
```

```
Normal Scheduled 22m default-scheduler Successfully assigned default/apache-deployment-85f545984c-m8m9z to ip-192-168-31-137.us-west-2.compute.internal
Normal Pulling 22m kubelet Pulling image "coulibalykd/apacheimagecdcc:v1.0"
Normal Pulled 22m kubelet Successfully pulled image "coulibalykd/apacheimagecdcc:v1.0" in 21.744173526s
Normal Created 22m kubelet Created container apache-container
Normal Started 22m kubelet Started container apache-container
```

```
PS C:\Users\couli> kubectl apply -f "G:\My Drive\cloudcomputing\CloudSpaceAcademy\DevOps\Kubernetes\playground-loadbalancer.yml"
service/apache-loadbalancer created
PS C:\Users\couli> kubectl get service
```

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
apache-loadbalancer	LoadBalancer	10.100.218.61	ae3f8d20e4fb4a769fd9934de872e7e-1822598898.us-west-2.elb.amazonaws.com	80:30099/TCP	67s
kubernetes	ClusterIP	10.100.0.1	<none>	443/TCP	129m

```
PS C:\Users\couli> []
```

```
playground-loadbalancer.yml > {} spec > {} ports > {} 0 > {} protocol
```

```
1 apiVersion: v1
```

```
service/apache-loadbalancer created
PS C:\Users\couli> kubectl get service
```

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
apache-loadbalancer	LoadBalancer	10.100.218.61	ae3f8d20e4fb4a769fd9934de872e7e-1822598898.us-west-2.elb.amazonaws.com	80:30099/TCP	67s
kubernetes	ClusterIP	10.100.0.1	<none>	443/TCP	129m

```
PS C:\Users\couli> kubectl describe service
```

```
Name:
Events:
Type: Reason: Age: From: Message:
----
Normal EnsuringLoadBalancer 7m6s service-controller Ensuring load balancer
Normal EnsuredLoadBalancer 7m3s service-controller Ensured load balancer
```

```
Name:
Namespace:
Labels:
Annotations:
Selector:
Type:
IP Family Policy:
IP Families:
IP:
IPs:
Port:
TargetPort:
Endpoints:
Session Affinity:
Events:
PS C:\Users\couli> []
```

```
File Edit Selection View Go Run Terminal Help playground-loadbalancer.yml - Kubernetes - Visual Studio Code [Administrator]

EXPLORER playground-loadbalancer.yml x
  playground-loadbalancer.yml > {} spec > {} ports > {} 0 > {} protocol
  1 aniVersion: v1

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

PS C:\Users\couli> kubectl describe pods
Name:         apache-deployment-85f545984c-m8m9z
Namespace:    default
Priority:      0
Node:         ip-192-168-31-137.us-west-2.compute.internal/192.168.31.137
Start Time:   Sat, 23 Apr 2022 22:40:21 -0400
Labels:       app=apache
              pod-template-hash=85f545984c
Annotations:  kubernetes.io/psp: eks.privileged
Status:       Running
IPs:          192.168.7.32
              192.168.7.32
Controlled By: Replicaset/apache-deployment-85f545984c
Containers:
  apache-container:
    Container ID:   docker://71c8a91d8bfa5c182f99074f7dab9e4a6b8ff641c66a3487a639ad508d1c88
    Image:          coulibalykd/apacheimagejdk:v1.0
    Image ID:       docker-pullable://coulibalykd/apacheimagejdk@sha256:67cc4a97b0f51ba23761815f5e4044749964f6336f5a63ded93e6e7c8a96b19
    Port:           80/TCP
    Host Port:      0/TCP
    State:          Running
      Started:      Sat, 23 Apr 2022 22:40:44 -0400
    Ready:          True
    Restart Count:  0
    Environment:    <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-wtrpl (ro)
Conditions:
  Type             Status
  Initialized       True
  Ready             True
  ContainersReady   True
  PodScheduled      True
Volumes:
  kube-api-access-wtrpl:
    Type:              Projected (a volume that contains injected data from multiple sources)
    TokenExpirationSeconds: 3607
    ConfigMapName:       kube-root-ca.crt
    ConfigOptional:      <nil>
```

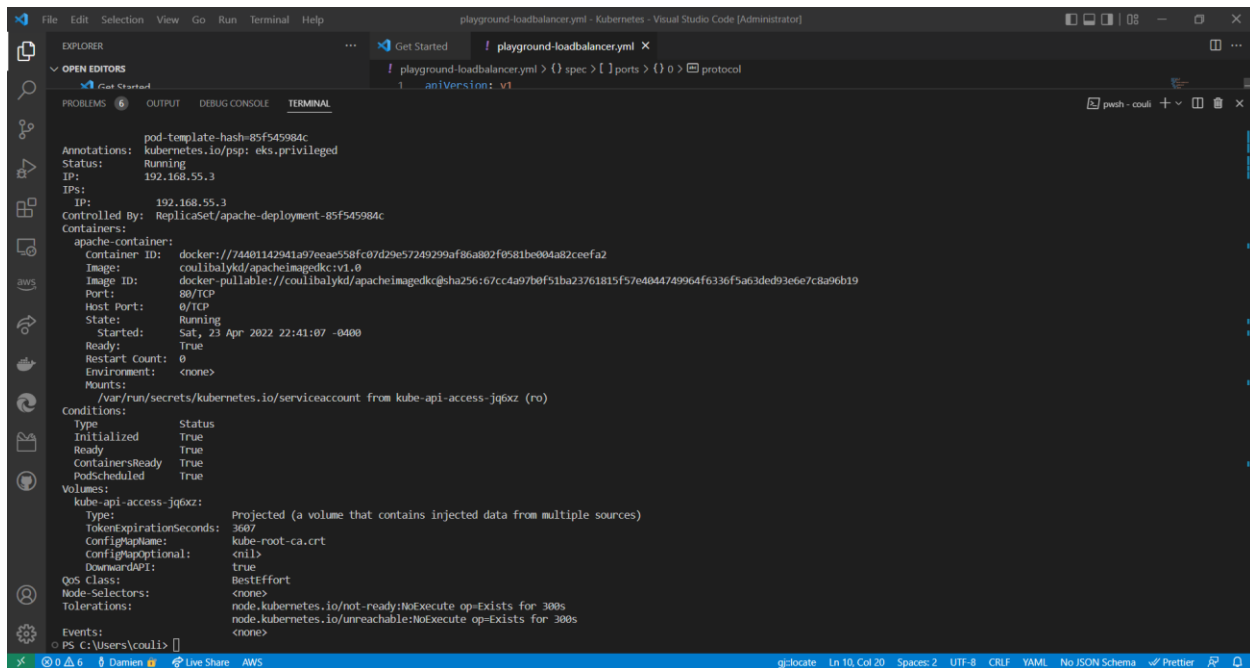
```
File Edit Selection View Go Run Terminal Help playground-loadbalancer.yml - Kubernetes - Visual Studio Code [Administrator]

EXPLORER playground-loadbalancer.yml x
  playground-loadbalancer.yml > {} spec > {} ports > {} 0 > {} protocol
  1 aniVersion: v1

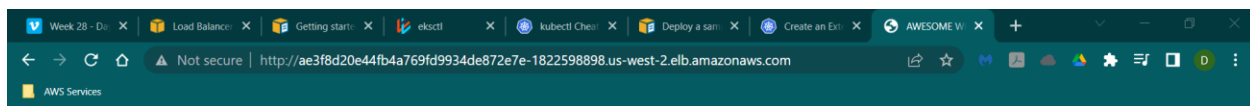
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

TokenExpirationSeconds: 3607
ConfigMapName:         kube-root-ca.crt
ConfigOptional:        <nil>
DownwardAPI:           true
QoS Class:              BestEffort
Node-Selectors:         <none>
Tolerations:            node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
                       node.kubernetes.io/unreachable:NoExecute op=Exists for 300s
Events:                 <none>

Name:         apache-deployment-85f545984c-rsjm
Namespace:    default
Priority:      0
Node:         ip-192-168-55-188.us-west-2.compute.internal/192.168.55.188
Start Time:   Sat, 23 Apr 2022 22:40:44 -0400
Labels:       app=apache
              pod-template-hash=85f545984c
Annotations:  kubernetes.io/psp: eks.privileged
Status:       Running
IPs:          192.168.55.3
              192.168.55.3
Controlled By: Replicaset/apache-deployment-85f545984c
Containers:
  apache-container:
    Container ID:   docker://74a01142941a97eeae558fc07d29e57249299af86a802f0581be904a82ceef2
    Image:          coulibalykd/apacheimagejdk:v1.0
    Image ID:       docker-pullable://coulibalykd/apacheimagejdk@sha256:67cc4a97b0f51ba23761815f5e4044749964f6336f5a63ded93e6e7c8a96b19
    Port:           80/TCP
    Host Port:      0/TCP
    State:          Running
      Started:      Sat, 23 Apr 2022 22:41:07 -0400
    Ready:          True
    Restart Count:  0
    Environment:    <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-jq6xz (ro)
Conditions:
  Type             Status
```



```
pod-template-hash-85f545984c
Annotations:  kubernetes.io/psp: eks.privileged
Status:      Running
IP:          192.168.55.3
IPs:
  IP:        192.168.55.3
Controlled By:  ReplicaSet/apache-deployment-85f545984c
Containers:
  apache-container:
    Container ID:  docker://74401142941a97eeae558fc07d29e57249299af86a802f0581be004a82ceefa2
    Image:         coulibalykd/apacheimage@sha256:67cc4a97b0f51ba23761815f57e4044749964f6336f5a63ded93e6e7c8a9eb19
    Port:          80/TCP
    Host Port:     0/TCP
    State:         Running
      Started:     Sat, 23 Apr 2022 22:41:07 -0400
    Ready:         True
    Restart Count: 0
    Environment:  <none>
    Mounts:
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-jg6xz (ro)
Conditions:
  Type              Status
  Initialized       True
  Ready             True
  ContainersReady   True
  PodScheduled      True
Volumes:
  kube-api-access-jg6xz:
    Type:              Projected (a volume that contains injected data from multiple sources)
    TokenExpirationSeconds: 3607
    ConfigMapName:       kube-root-ca.crt
    ConfigMapOptional:   <nil>
    DownwardAPI:         true
  QoS Class:           BestEffort
  Node-Selectors:      <none>
  Tolerations:         node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
                      node.kubernetes.io/unreachable:NoExecute op=Exists for 300s
  Events:              <none>
```



Welcome to Our Website!

Damien requested a GREEN color on his website that we deploy in a docker container.

Website Version: 3.0

WELCOME TO OUR AWESOME WEBSITE!!!