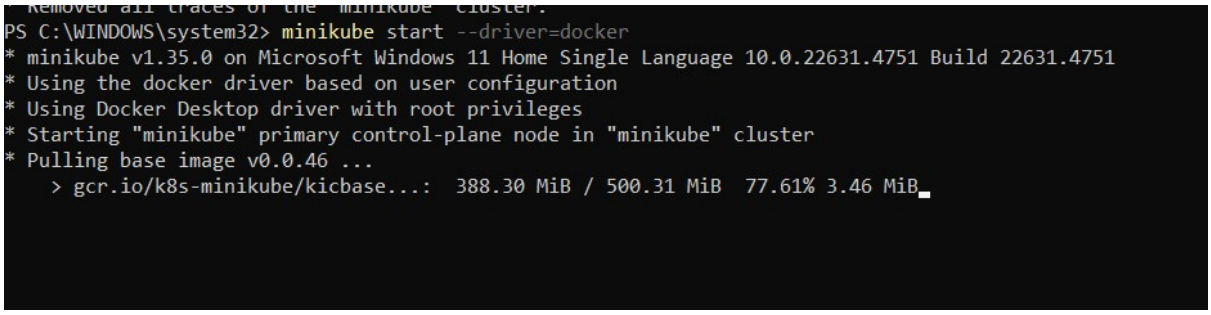
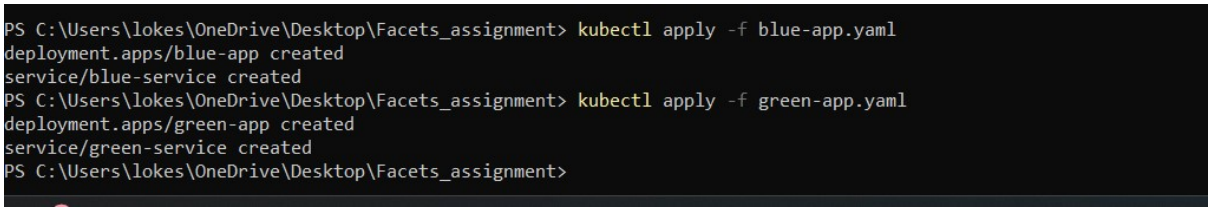
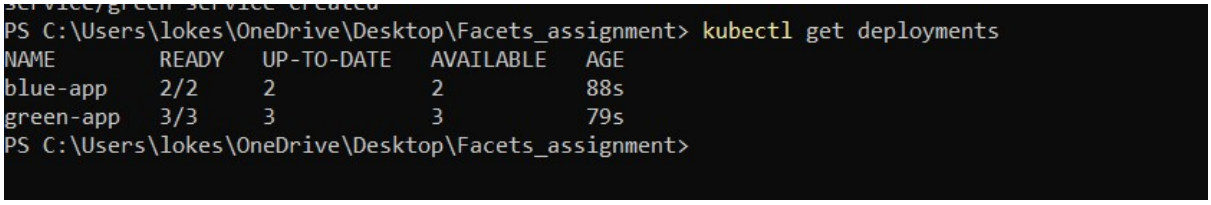
Minikube start:



Blue green deployment creation:



Deployment status:



Overall services and deployment status:

```
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment> kubectl apply -f blue-app.yaml
deployment.apps/blue-app created
service/blue-service created
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment> kubectl apply -f green-app.yaml
deployment.apps/green-app created
service/green-service created
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment> kubectl get deployments
NAME        READY   UP-TO-DATE   AVAILABLE   AGE
blue-app    2/2     2            2           88s
green-app   3/3     3            3           79s
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment> kubectl get pods
NAME                         READY   STATUS    RESTARTS   AGE
blue-app-7d65896bbd-mkksd    1/1     Running   0          2m47s
blue-app-7d65896bbd-rlgpt    1/1     Running   0          2m47s
green-app-78644c9957-k9bp9   1/1     Running   0          2m38s
green-app-78644c9957-m6k6c   1/1     Running   0          2m38s
green-app-78644c9957-mxzsv   1/1     Running   0          2m38s
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment>
>> kubectl get services^C
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment> kubectl get services
NAME            TYPE        CLUSTER-IP       EXTERNAL-IP   PORT(S)    AGE
blue-service    ClusterIP   10.110.229.217   <none>        8080/TCP   3m6s
green-service   ClusterIP   10.101.146.226   <none>        8081/TCP   2m57s
kubernetes      ClusterIP   10.96.0.1        <none>        443/TCP    9m14s
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment>
```

Minikube ingress enable:

```
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment> minikube addons enable ingress
* ingress is an addon maintained by Kubernetes. For any concerns contact minikube on GitHub.
You can view the list of minikube maintainers at: https://github.com/kubernetes/minikube/blob/master/OWNERS
* After the addon is enabled, please run "minikube tunnel" and your ingress resources would be available at "127.0.0.1"
  - Using image registry.k8s.io/ingress-nginx/kube-webhook-certgen:v1.4.4
  - Using image registry.k8s.io/ingress-nginx/kube-webhook-certgen:v1.4.4
  - Using image registry.k8s.io/ingress-nginx/controller:v1.11.3
* Verifying ingress addon...
* The 'ingress' addon is enabled
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment>
```

Applying ingress.yaml :

```
d  spec.rules[0].http.paths[1].weight
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment> kubectl apply -f ingress.yaml
ingress.networking.k8s.io/app-ingress created
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment>
```

Starting tunnel:

```
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment> minikube tunnel
* Tunnel successfully started

* NOTE: Please do not close this terminal as this process must stay alive for the tunnel to be accessible ...

! Access to ports below 1024 may fail on Windows with OpenSSH clients older than v8.1. For more information, see: https://minikube.sigs.k8s.io/docs/handbook/accessing/#access-to-ports-1024-on-windows-requires-root-permission
* Starting tunnel for service app-ingress.
```

Checking blue app deployment:

```
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment> curl http://localhost/blue


StatusCode        : 200
StatusDescription : OK
Content           : I am blue

RawContent        : HTTP/1.1 200 OK
                    Connection: keep-alive
                    X-App-Name: http-echo
                    X-App-Version: 1.0.0
                    Content-Length: 10
                    Content-Type: text/plain; charset=utf-8
                    Date: Wed, 05 Feb 2025 21:01:27 GMT

                    I am blue

Forms             : {}
Headers           : {[Connection, keep-alive], [X-App-Name, http-echo], [X-App-Version, 1.0.0], [Content-Length,
                    10]...}
Images            : {}
InputFields       : {}
Links             : {}
ParsedHtml        : mshtml.HTMLDocumentClass
RawContentLength  : 10


PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment>
```

Checking green app deployment:

```
PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment> curl http://localhost/green


StatusCode        : 200
StatusDescription : OK
Content           : I am green

RawContent        : HTTP/1.1 200 OK
                    Connection: keep-alive
                    X-App-Name: http-echo
                    X-App-Version: 1.0.0
                    Content-Length: 11
                    Content-Type: text/plain; charset=utf-8
                    Date: Wed, 05 Feb 2025 21:02:56 GMT

                    I am green

Forms             : {}
Headers           : {[Connection, keep-alive], [X-App-Name, http-echo], [X-App-Version, 1.0.0], [Content-Length, 11]...}
Images            : {}
InputFields       : {}
Links             : {}
ParsedHtml        : mshtml.HTMLDocumentClass
RawContentLength  : 11



PS C:\Users\lokes\OneDrive\Desktop\Facets_assignment>
```

Deployment using terraform status (after terraform apply) :

```
PS C:\WINDOWS\system32> kubectl get pods
NAME                          READY   STATUS    RESTARTS        AGE
bar-78cc54f9c8-47787          1/1     Running   0               85s
bar-78cc54f9c8-b4r88          1/1     Running   0               85s
bar-78cc54f9c8-brrhr          1/1     Running   0               85s
blue-app-7d65896bbd-mkksd     1/1     Running   1 (2d22h ago)   2d23h
blue-app-7d65896bbd-rlgpt     1/1     Running   1 (2d22h ago)   2d23h
boom-57b7df7cf6-469pw         1/1     Running   0               85s
boom-57b7df7cf6-599sx         1/1     Running   0               85s
boom-57b7df7cf6-gf48l         1/1     Running   0               85s
boom-57b7df7cf6-qxcxs         1/1     Running   0               85s
foo-858857747f-2thcs          1/1     Running   0               85s
foo-858857747f-6pvv2          1/1     Running   0               85s
green-app-78644c9957-k9bp9    1/1     Running   1 (2d22h ago)   2d23h
green-app-78644c9957-m6k6c    1/1     Running   1 (2d22h ago)   2d23h
green-app-78644c9957-mxzsv    1/1     Running   1 (2d22h ago)   2d23h
PS C:\WINDOWS\system32> kubectl get services
NAME            TYPE        CLUSTER-IP       EXTERNAL-IP   PORT(S)    AGE
bar             ClusterIP   10.108.239.169   <none>        8082/TCP   93s
blue-service    ClusterIP   10.110.229.217   <none>        8080/TCP   2d23h
boom            ClusterIP   10.97.179.73     <none>        8083/TCP   93s
foo             ClusterIP   10.106.202.138   <none>        8081/TCP   93s
green-service   ClusterIP   10.101.146.226   <none>        8081/TCP   2d23h
kubernetes      ClusterIP   10.96.0.1        <none>        443/TCP    2d23h
PS C:\WINDOWS\system32> kubectl get ingress
NAME          CLASS   HOSTS          ADDRESS        PORTS   AGE
app-ingress   nginx   my-app.local   192.168.49.2   80      99s
```