# \*\*CKA Lab Part 9 - Networking\*\*

## \*\*Lab 1 - Create a ClusterIP\*\*

- Create a deployment consisting of three nginx containers.
- Create a service of type "Cluster IP" which is exposed on port 8080 that facilitates connections to the aforementioned deployment, which listens on port 80
- Test the connectivity by spinning up a pod

#### \*\*Lab 2 - Create a LoadBalancer \*\*

- Note, for this to work your environment must be able to provision load balancers (GKE, AKE, etc)
- Create a deployment consisting of three nginx containers.
- Create a service of type "Load Balancer" which is exposed on port 8080 that facilitates connections to the aforementioned deployment, which listens on port 80.
- Test the connectivity by accessing the website

#### \*\*Lab 3 - Create a NodePort\*\*

- Create a deployment consisting of three nginx containers.
- Create a service of type "NodePort" which is exposed on port 30010 that facilitates connections to the aforementioned deployment, which listens on port 80.
- Test the connectivity by spinning up a pod

### \*\*Lab 4 - Create a Ingress Resource\*\*

Create a ingress resource "website-ingress" that directs traffic to the following conditions:

- Base domain website.com
  - Default backend service is "default-service" on port 80
  - o /backend directs traffic to "backend-service" on port 443
  - o /test directs traffic to "test-service" on port 8000