**CKA LAB PART 3 - 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

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**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

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**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

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**Lab 4 - Create an Ingress Resource**

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

• Base domain website.com

o 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

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