**Section C:  Kubernetes Questions**

1. **What is the difference between ingress controller and ingress resources**

Ingress resources is a set of rules of the traffic for the cluster, while ingress controller is a controller which execute or implement the those rules

1. **In managed kubernetes service (EKS, GKE, AKS ) what will happen when you install ingress controller ?**

you can monitor the controller and create application routing role within the service or the service became application gateway

**3.    I already deployed HPA (Horizontal Pod Autoscaler ) but it seems the HPA didn’t get the metric (unknown). In your experience, what could be the cause of this issue ?**

* Wrong hostname configuration or any problems related with hostname so hostname can’t be accessed
* SSL/TLS certificate problems
* No metric server or any problems with the metric server

1. Take a backup of the etcd cluster and save it to /tmp/etcd-backup.db
2. Create a Pod called redis-storage with image: redis:alpine with a Volume of type emptyDir that lasts for the life of the Pod. Specs on the right. Just write the manifest
3. **How to get the internal IP address of all nodes using jsonpath**

kubectl get nodes -o jsonpath='{.items[\*].status.addresses[?(@.type=="InternalIP")].address}'

1. **What is the difference between taint and toleration and when to use it ?**

Taint and Tollerance are used to make restrictions on what pod can do. Those can be used when we need to specify the resources on the nodes of the pod and setup which pod will be attach on specific nodes.

Taint is used to make pod can’t be attached to chosen node (usually because of the resources or the configuration that can’t be used by the pod) while toleration is giving a pod some access so the chosen pod can be attached into the chosen node