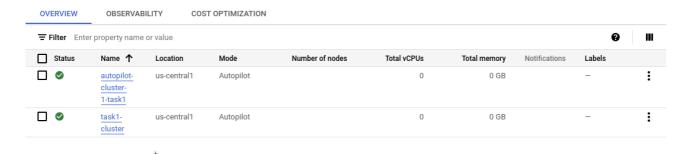
## Task1: Set Up Initial Infrastructure

1. Create a Kubernetes Cluster on GKE (or equivalent tool)



2. Install and configure kubectl to manage your Kubernetes cluster

```
howardnzy13@cloudshell:~ (isec6000lab)$ gcloud container clusters create-auto taski-cluster \cdots-location=us-central1
Note: The Pod address range limits the maximum size of the cluster. Please refer to https://cloud.google.com/kubernetes-engine/docs/how-to/flexible-pod-cidr to learn how to optimize IP address allocation.
Creating cluster taski-cluster in us-central1... Cluster is being health-checked...working.
Creating cluster taski-cluster in us-central1... Cluster is being health-checked (master is healthy)...done.
Created [https://container.googleapais.com/vl/projects/isec6000lab/s/central1/clusters/taski-cluster].
To inspect the contents of your cluster, go to: https://console.cloud.google.com/kubernetes/workload_/gcloud/us-central1/taski-cluster?project=isec6000lab kubeconfig entry generated for taski-cluster.
LOCATION: us-central1
MASTER VERSION: 1.27.3-gke.100
MASTER IP: 35.202.251.105
MACHINE TYPE: e2-medium
NODE VERSION: 1.27.3-gke.100
NUM NODES: 3
STATUS: RUNNING

howardhzy13@cloudshell:~ (isec6000lab)$ gcloud container clusters get-credentials taski-cluster --region us-central1 --project isec6000lab Fetching cluster endpoint and auth data.
kubeconfig entry generated for taski-cluster.
howardhzy13@cloudshell:~ (isec6000lab)$
```