1. You can create a zonal cluster by using the gcloud CLI or the Google Cloud console.
2. We'll use gcloud command using Google Cloud Shell
3. We'll create a cluster with a custom boot disk to comply with the lab policies. If you specify a disk size higher than what's specified in labs quick start page, the cluster creation command will throw up an error.

`--disk-size=`*`DISK_SIZE`* Size for node VM boot disks in GB. Defaults to 100GB. *`DISK_SIZE`* should be less than 12 GB

`--disk-type=`*`DISK_TYPE`* Type of the node VM boot disk. For version 1.24.0+, defaults to pd-balanced. *`DISK_TYPE`* must be: `pd-standard`

`--num-nodes=`*`NUM_NODES`*; default=3. *`NUM_NODES`* should be = 1

4. We'll run the command below to set the default compute zone to us-west1-a. If the default zone is not set, you'll need to include –zone options in all the commands for your cluster.

   gcloud config set compute/zone us-west1-a

5. Type the following command to create a cluster now

gcloud container clusters create gke-deep-dive --num-nodes=1 --disk-type=pd-standard --disk-size=10

Make sure of the name format: (?:[a-z](?:[-a-z0-9]{0,38}[a-z0-9])?)

6. The above command creates a new GKE cluster:
   a. Name: gke-deep-dive
   b. Number of nodes: 1
   c. Boot disk type: HDD
   d. Size: 10GB
7. Give it about 10-15 minutes to create the cluster
8. Verify the cluster
   a. Using console
   b. Gcloud command: gcloud container clusters list
9. Delete the CLuster: gcloud container clusters delete gke-deep-dive

a. Enter y

In this lab we created a single node zonal cluster by using the gcloud CLI. If we are to create a multi zonal cluster, we'll use the **`--node-locations`** flag in the command.

--node-locations *COMPUTE_ZONE*,*COMPUTE_ZONE1*

The following command creates a multi-zonal cluster

gcloud container clusters create gke-deep-dive --num-nodes=3 --disk-type=pd-standard --disk-size=10 --zone us-central1-a --node-locations us-west1-a,us-west1-b,us-west1-c