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# Assignment-1

Submission for Aditya Girisha (012145901)

### **Using Gcloud**

• Install and Authenticate on Gcloud

```
sudo apt-get update && sudo apt-get install google-cloud-cli
```

#### 1. Create a new VM

```
gcloud compute instances create instance-1 \
    --project=csci-433923 \
    --zone=us-west2-a \
    --machine-type=e2-micro \
    --network-interface=network-tier=PREMIUM,stack-type=IPV4_ONLY,subnet=default \
    --maintenance-policy=MIGRATE \
    --provisioning-model=STANDARD
```

# 2.Create a Snapshot

```
gcloud compute snapshots create snapshot-0 \
    --source-disk-zone=us-west2-a \
    --source-disk=instance-1 \
    --snapshot-type=STANDARD \
    --storage-location=US-CENTRAL1
```

#### 3. Get Status of First VM

```
gcloud compute instances describe instance-1 \
    --zone=us-west2-a \
    --project=csci-433923 \
    --format="get(status)"
```

## 4. Stop First VM

```
gcloud compute instances stop instance-1 \
    --zone=us-west2-a \
    --project=csci-433923
```

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# 5. Clone the VM from the Snapshot

```
gcloud compute instances create instance-2 \
    --project=csci-433923 \
    --zone=us-central1-a \
    --source-snapshot=snapshot-0 \
    --network-interface=network-tier=PREMIUM,stack-type=IPV4_ONLY,subnet=default \
    --maintenance-policy=MIGRATE \
    --provisioning-model=STANDARD
```

### 6. Stop the second VM

```
gcloud compute instances stop instance-2 \
--zone=us-central1-a \
--project=csci-433923
```

#### 7. Remove the first VM

```
gcloud compute instances delete instance-1 \
--zone=us-west2-a \
--project=csci-433923 \
--quiet
```

#### Screenshots

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```
-(kali®LAPTOP-DS6ATPOD)-[~/Workspace]
 $ gcloud compute instances create instance-1 \
        --project=csci-433923
        --zone=us-west2-a \
        --machine-type=e2-micro \
--network-interface=network-tier=PREMIUM,stack-type=IPV4_ONLY,subnet=default \
        --maintenance-policy=MIGRATE
        --provisioning-model=STANDARD
Created [https://www.googleapis.com/compute/v1/projects/csci-433923/zones/us-west2-a/instances/instance-1].
NAME ZONE MACHINE_TYPE PREEMPTIBLE INTERNAL_IP EXTERNAL_IP STATUS
instance-1 us-west2-a e2-micro 10.168.0.4 34.94.121.217 RUNNING
               -(kali®LAPTOP-DS6ATP0D)-[~/Workspace]
             $ gcloud compute snapshots create snapshot-0
                       --source-disk-zone=us-west2-a \
                      --source-disk=instance-1 \
                      --snapshot-type=STANDARD \
                      --storage-location=US-WEST1
   Creating gce snapshot snapshot-0...done.
          -(kali: LAPTOP-DS6ATPOD)-[~/Workspace]
   _$ gcloud compute instances describe instance-1 \
                --zone=us-west2-a \
                --project=csci-433923 \
               --format="get(status)"
  RUNNING
     -(kali: LAPTOP-DS6ATPOD)-[~/Workspace]
 __$ gcloud compute instances stop instance-1 \
        --zone=us-west2-a \
        --project=csci-433923
Stopping instance(s) instance-1...done.
Updated [https://compute.googleapis.com/compute/v1/projects/csci-433923/zones/us-west2-a/instances/instance-1].
    -(kali&LAPTOP-DS6ATPOD)-[~/Workspace]
 $ gcloud compute instances create instance-2 \
--project=csci-433923 \
       --zone=us-central1-a \
--source-snapshot=snapshot-0 \
--source-snapshot=snapshot=0 \
--network-interface=network-tier=PREMIUM,stack-type=IPV4_ONLY,subnet=default \
--metwork-interface=network-tier=PREMIUM,stack-type=IPV4_ONLY,subnet=default \
--metwork-interface=network-tier=PREMIUM,stack-type=IPV4_ONLY,subnet=default \
--metwork-interface=network-type=IPV4_ONLY,subnet=default \
--metwork-interface=network-tier=network-type=IPV4_ONLY,subnet=default \
--metwork-interface=network-tier=network-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,subnetwork-type=IPV4_ONLY,sub
 (kali® LAPTOP-DS6ATPOD)-[~/Workspace]

$\forall \text{gcloud compute instances stop instance-2 \\ --zone=us-centrall-a \\}
--project=csci-433923
Stopping instance(s) instance-2...done.
Updated [https://compute.googleapis.com/compute/v1/projects/csci-433923/zones/us-central1-a/instances/instance-2].
      -(kali&LAPTOP-DS6ATPOD)-[~/Workspace]
 -\$ gcloud compute instances delete instance-1 ackslash
            -zone=us-west2-a
            -project=csci-433923 \
```

Deleted [https://www.googleapis.com/compute/v1/projects/csci-433923/zones/us-west2-a/instances/instance-1].

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