

## 1. Google Cloud Fundamentals: Getting Started with Compute Engine

### *//Creating Virtual Machine 1(translated from cloud console to gcloud commandline)*

```
gcloud config set compute/zone us-central1-a
gcloud compute instances create my-vm-1 \
--machine-type=n1-standard-1 \
--image-project=debian-cloud \
--image=debian-9-stretch-v20190213 \
--boot-disk-size=10GB --boot-disk-type=pd-standard \
--subnet=default
gcloud compute firewall-rules create default-allow-http \
--direction=INGRESS \
--priority=1000 \
--network=default \
--action=ALLOW \
--rules=tcp:80 \
--source-ranges=0.0.0.0/0 \
--target-tags=http-server
```

### *//Creating Virtual Machine 2*

```
gcloud config set compute/zone us-central1-b
gcloud compute instances create my-vm-2 \
--machine-type=n1-standard-1 \
--image-project=debian-cloud \
--image=debian-9-stretch-v20190213 \
--subnet=default
```

## ***2. Creating Virtual Machines***

### ***//Task 1: Create a Utility Virtual Machine***

```
gcloud config set compute/zone us-central1-c
gcloud compute instances create my-utility-vm \
--machine-type=n1-standard-1 \
--image-project=debian-cloud \
--image=debian-9-stretch-v20200910 \
--boot-disk-size=10GB
--boot-disk-type=pd-standard
--subnet=default
```

### ***//Task 2: Create a Windows Virtual Machine***

```
gcloud config set compute/zone europe-west2-a
gcloud compute instances create my-windows-vm \
--machine-type=n1-standard-2 \
--image-project=Windows Server \
--image=Windows Server 2016 Datacenter Core \
--boot-disk-size=100GB \
--boot-disk-type=pd-ssd \
--subnet=default

gcloud compute firewall-rules create default-allow=http \
--direction=INGRESS --priority=1000 --network=default --action=ALLOW \
--rules=tcp:80 --source-ranges=0.0.0.0/0 --target-tags=http-server

gcloud compute firewall-rules create default-allow=https \
--direction=INGRESS --priority=1000 --network=default --action=ALLOW \
```

```
--rules=tcp:443 --source-ranges=0.0.0.0/0 --target-tags=http-server
```

### ***//Task 3: Create a Custom Virtual Machine***

```
gcloud config set compute/zone us-west1-b
```

```
gcloud compute instances create my-custom-vm \
```

```
--machine-type=custom-6-32768 \
```

```
--image-project=debian-cloud \
```

```
--image=debian-9-stretch-v20200910 \
```

```
--boot-disk-size=10GB \
```

```
--boot-disk-type=pd-standard \
```

```
--subnet=default
```