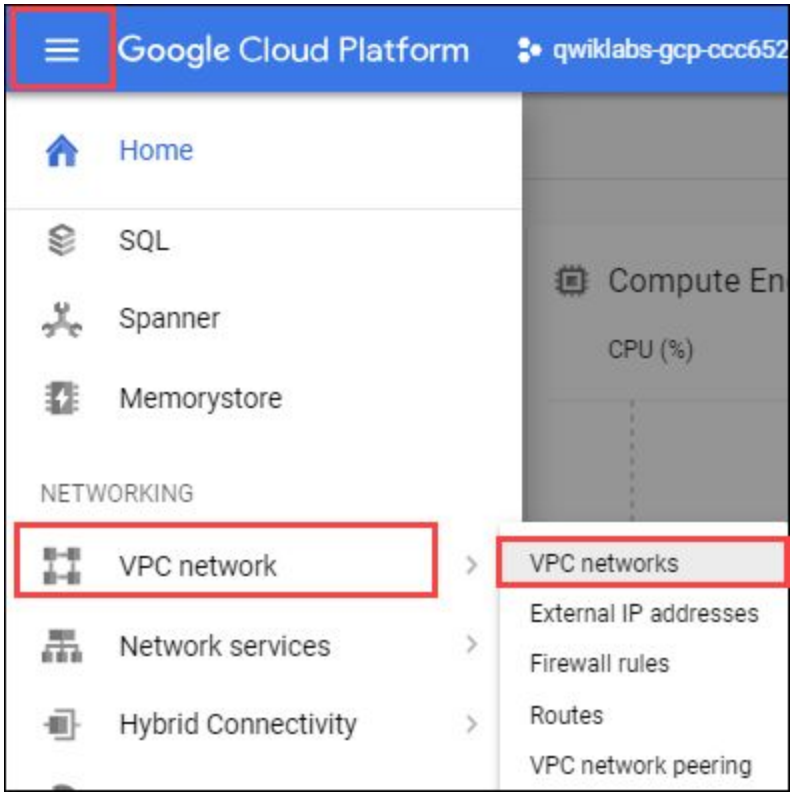
# Task 1:

Use the following procedure(and name the subnets accordingly):

Create the **managementnet** network using the Cloud Console.

1. In the Cloud Console, navigate to **Navigation menu** (☰) > **VPC network** > **VPC networks**.




2. Notice the **default** and **mynetwork** networks with their subnets.

   Each Google Cloud project starts with the **default** network. In addition, the **mynetwork** network has been premade as part of your network diagram.
3. Click **Create VPC Network**.
4. Set the **Name** to `managementnet`.

5. For **Subnet creation mode**, click **Custom**.
6. Set the following values, leave all other values at their defaults:

| Property | Value (type value or select option as specified) |
|---|---|
| Name | managementsubnet-us |
| Region | us-central1 |
| IP address range | 10.130.0.0/20 |

7. Click **Done**.

**Repeat the above step for the second subnet.**

# Task 2:

```
gsutil -m cp -r gs://cloud-training/gsp321/dm .
```

```
cd dm
```

```
ls
```

```
nano prod-network.yaml
```

```
(and change region to us-east1)
```

```
(create a pod)
```

```
gcloud deployment-manager deployments create griffin-prod --config
prod-network.yaml
```

# Task 3:

(Creating instance in compute instance)

>> Go to compute engine > VM instances > Create instances

>> Name: griffin-dev-db

>> Region: South Carolina

>> Zone: us-east1-b

>> Click management,security……. > networking

>> Network tag: bastion

>> Network interfaces: griffin dev vpc

>> Add network interfaces of prod-magna…

>> Create

>> From nav menu > VPC network > Firewall > Create firewall

>> Name: allow-bastion-dev-ssh

>> Network: griffin-dev-vpc

>> Target tags: bastion

>> IP range: 192.168.32.0/20

>> Tick tcp and enter 22

>> Create

>> (2nd firewall)

>> Name: allow-bastion-prod-ssh

>> Network: griffin-prod-vpc

>> Target tags: bastion

>> 192.168.48.0/20

>> Tick tcp and enter 22

# Task 4:

>> Nav menu > SQL > Create instance > mySQL

>> instance id: griffin-dev-db

>> Create a password and remember it(password)

>> Region: South Carolina

>> Zone: 1-b

>> Create

>> (This takes quite some time, okay)

>> (In the shell): gcloud sql connect griffin-dev-db --user=root --quiet

>> Enter password

>> (As sql log opens):

>> Enter

```
CREATE DATABASE wordpress;
```

```
GRANT ALL PRIVILEGES ON wordpress.* TO "wp_user"@"%" IDENTIFIED BY "stormwind_rules";
```

```
FLUSH PRIVILEGES;
```

>> Exit the SQL log by using “exit”

# Task 5:

Creating kubernetes cluster

>> Nav menu > Kubernetes engine > Clusters > Create cluster

>> Name: griffin-dev

>> Zonal

>> Zone: us-east1-b

>> Go to default pools from the left pane:

>> Size: 2

>>  Click node from the left pane:

>> Series: N1

>> Machine type: 4 cpu

>> Click networking from left pane:

>> Network: griffin-dev-vpc

>> Node subnet: griffin-dev-wp

>> Create

>> Takes hell lot of time

# Task 6:

>> gsutil cp -r gs://cloud-training/gsp321/wp-k8s .

>> cd wp-k8s/

>> ls

>> nano wp-env.yaml

>> In string data:

Replace username's value with 'wp_user' and password's value as 'stormwind_rules'

>> Save and exit the file

>> Go to clusters in kubernetes engine and click on 'connect' button in the griffin-dev row and run in cloud shell

>> kubectl apply -f wp-env.yaml

>>

```
gcloud iam service-accounts keys create key.json \

--iam-account=cloud-sql-proxy@$GOOGLE_CLOUD_PROJECT.iam.gserviceaccount.com

kubectl create secret generic cloudsql-instance-credentials \

    --from-file key.json
```

# Task 7:

>> Nav menu > sql

>> ls

>> nano wp-deployment.yaml

>> Copy connection name from the sql overview

>> Replace your sql instance with a connection name.

>> Save and exit

>> kubectl create -f wp-deployment.yaml

>> kubectl create -f wp-service.yaml

>> In services and Ingress of kubernetes engine you can see wordpress

>> Deployments take a lil time, tbh.

## Task 8:

>> Nav menu > monitoring > uptime check(left pane)

>> Create uptime check

>> title: WordPress uptime

>> Hostname: copy the deployment ip and paste

>> Path: /

>> click next couple of times

>> test

>> create

## Task 9:

>> nav menu > IAM

>> Copy second username and click add

>> Give editor permissions

>> Save