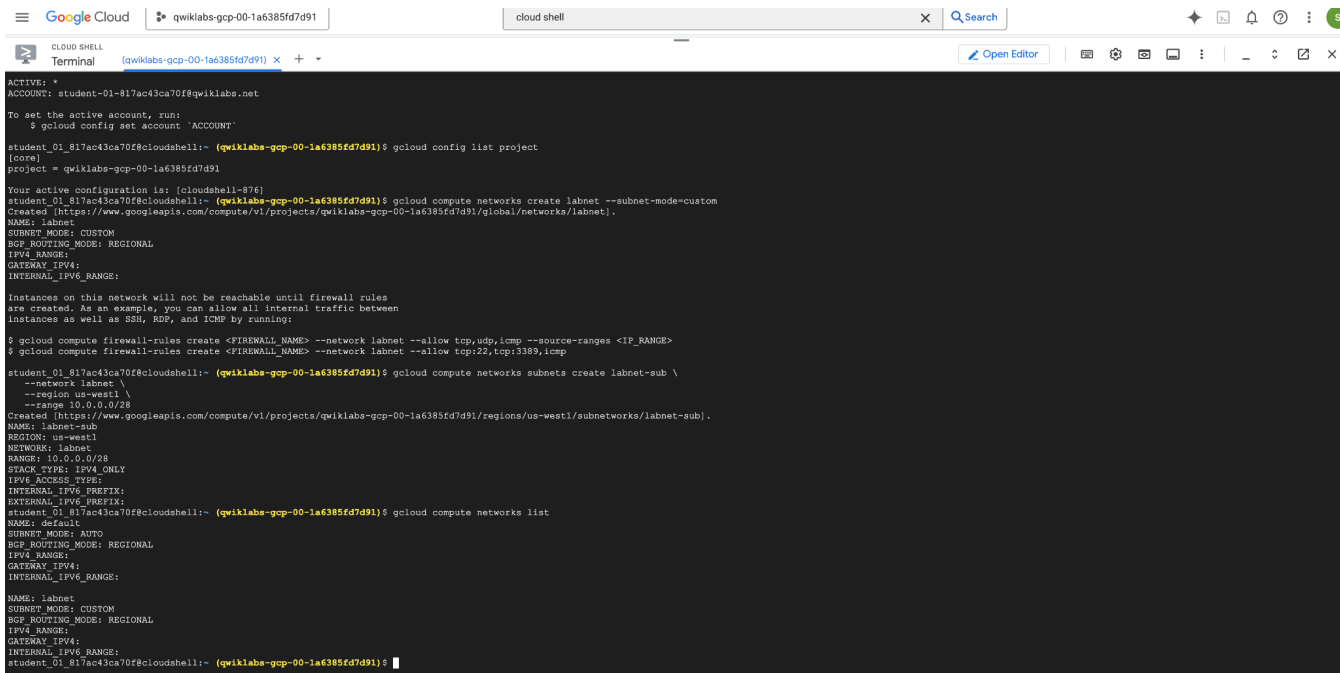


COURSE 1_LAB 1: CREATING A VPC USING CLOUD SHELL (IN GOOGLE CLOUD)



```
ACTIVE: *
ACCOUNT: student-01-817ac43ca70f@qwiklabs.net

To set the active account, run:
$ gcloud config set account 'ACCOUNT'

student_01_817ac43ca70f@cloudshell:~ (qwiklabs-gcp-00-1a6385fd7d91)$ gcloud config list project
[core]
project = qwiklabs-gcp-00-1a6385fd7d91

Your active configuration is: [cloudshell-876]
student_01_817ac43ca70f@cloudshell:~ (qwiklabs-gcp-00-1a6385fd7d91)$ gcloud compute networks create labnet --subnet-mode=custom
Created [https://www.googleapis.com/compute/v1/projects/qwiklabs-gcp-00-1a6385fd7d91/global/networks/labnet].
NAME: labnet
SUBNET_MODE: CUSTOM
BGP_ROUTING_MODE: REGIONAL
IPV4_RANGE:
GATEWAY_IPV4:
INTERNAL_IPV6_RANGE:

Instances on this network will not be reachable until firewall rules
are created. As an example, you can allow all internal traffic between
instances as well as SSH, RDP, and ICMP by running:

$ gcloud compute firewall-rules create <FIREWALL_NAME> --network labnet --allow tcp,udp,icmp --source-ranges <IP_RANGE>
$ gcloud compute firewall-rules create <FIREWALL_NAME> --network labnet --allow tcp:22,tcp:3389,icmp

student_01_817ac43ca70f@cloudshell:~ (qwiklabs-gcp-00-1a6385fd7d91)$ gcloud compute networks subnets create labnet-sub \
--network labnet \
--region us-west1 \
--range 10.0.0.0/28
Created [https://www.googleapis.com/compute/v1/projects/qwiklabs-gcp-00-1a6385fd7d91/regions/us-west1/subnetworks/labnet-sub].
NAME: labnet-sub
REGION: us-west1
NETWORK: labnet
RANGE: 10.0.0.0/28
STACK_TYPE: IPV4_ONLY
IPV6_ACCESS_TYPE:
INTERNAL_IPV6_PREFIX:
EXTERNAL_IPV6_PREFIX:
student_01_817ac43ca70f@cloudshell:~ (qwiklabs-gcp-00-1a6385fd7d91)$ gcloud compute networks list
NAME: default
SUBNET_MODE: AUTO
BGP_ROUTING_MODE: REGIONAL
IPV4_RANGE:
GATEWAY_IPV4:
INTERNAL_IPV6_RANGE:

NAME: labnet
SUBNET_MODE: CUSTOM
BGP_ROUTING_MODE: REGIONAL
IPV4_RANGE:
GATEWAY_IPV4:
INTERNAL_IPV6_RANGE:
student_01_817ac43ca70f@cloudshell:~ (qwiklabs-gcp-00-1a6385fd7d91)$
```

Intro:

In this cloud security lab through the Google Cloud Platform, using a student assigned account, I was able to create a VPC (virtual private cloud) using Cloud Shell. In this lab, I used the provided commands to return the information visible in the picture to set up a VPC.

Task(s):

1: Create a network

2. Create a subnet

3. View the network: (This task included a question near the end to ensure passing this task.)

The question was what is the subnet mode of the labnet network you created?

1. Auto
2. None of these options
3. Default
4. custom

4. List subnets: (This task included a question near the end to ensure passing this task.)

What is the name of the subnet in the labnet network?

1. Labnet
2. Labnet-sub
3. None of these options
4. default

What is a VPC:

A VPC, which stands for virtual private cloud, can be used to create a sandbox environment. By definition, it is a private network within a public cloud, offering enhanced security and control over resources. It allows you to test new features, code, etc., without impacting a deployed project, build, or live system that users have access to. Some other functions include, but not limited to, are managing network configurations as well as connecting to other networks and services.

What is Cloud Shell:

Cloud Shell is a command-line tool used to test, build, and research information in the terminal, such as creating a VPC (virtual private cloud).

Conclusion:

In this lab, I was able to enter commands in Cloud Shell to create a network, create a subnet, view the network as well as list the subnets.