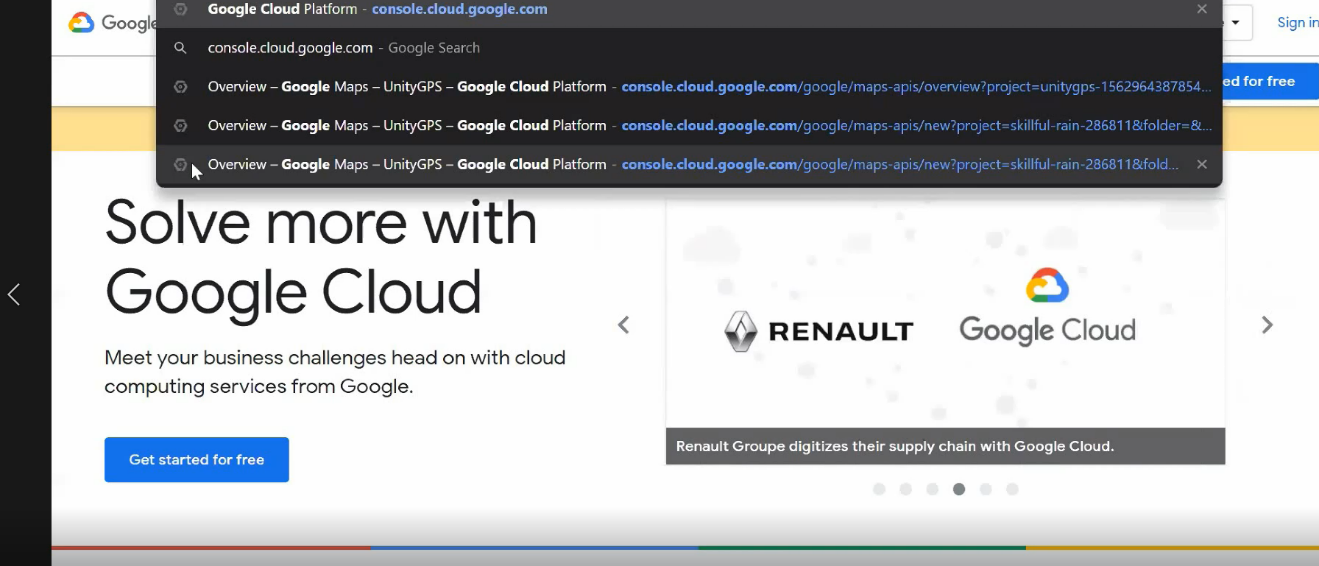
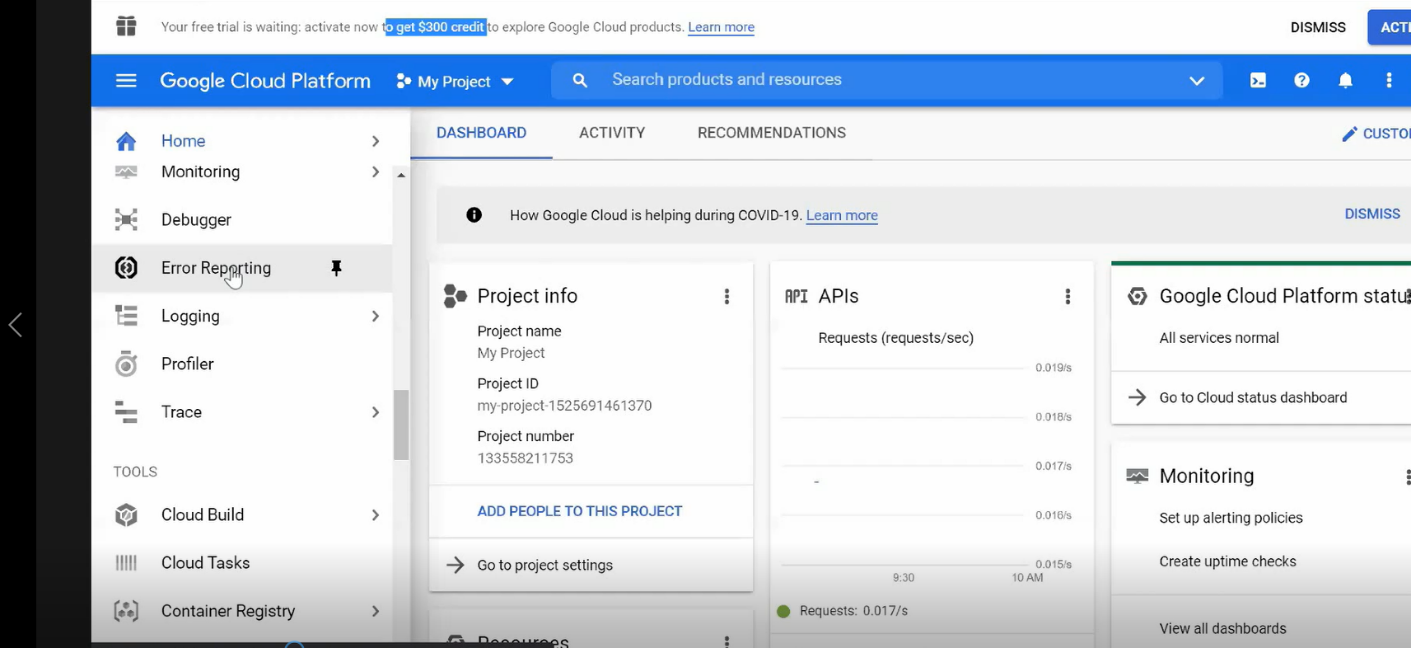
**GCP PROJECT TASK**

**1.First u have to make account in google cloud plateform.**



**2.Second you have to purchase the credits for billing.**



variable GCP\_dev\_proj1 {

default = "dev-proj-7981"

}

variable GCP\_prod\_proj2 {

default = "prod-proj-7981"

}

resource "google\_compute\_network" "vpc\_prodnetwork" {

name = "vpc\_network1"

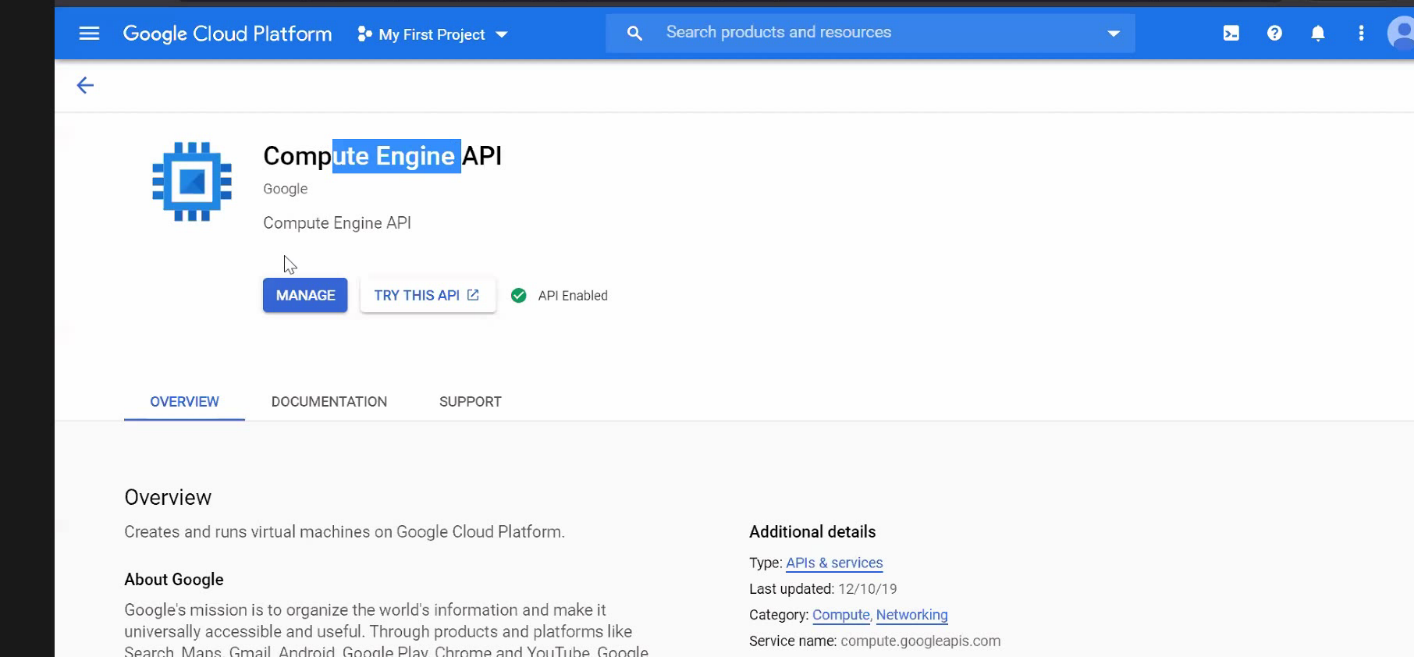
project = var.GCP\_prod\_proj2

routing\_mode = "GLOBAL"

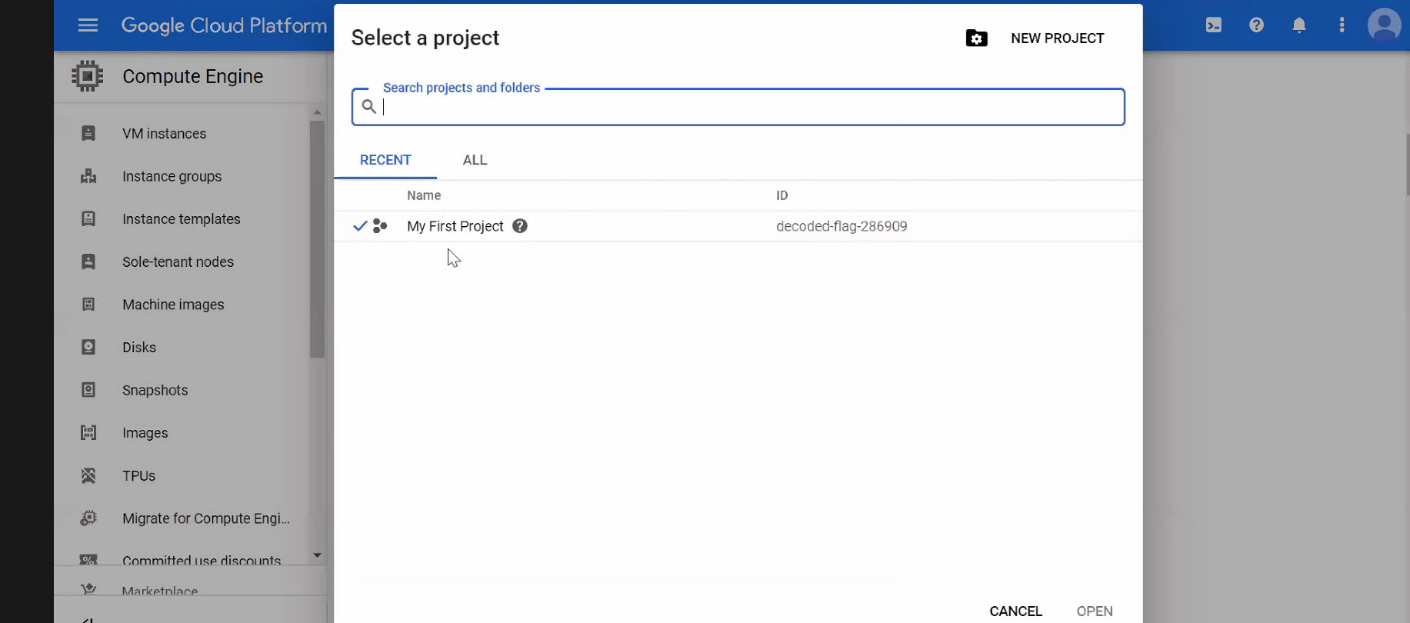
auto\_create\_subnetworks = false

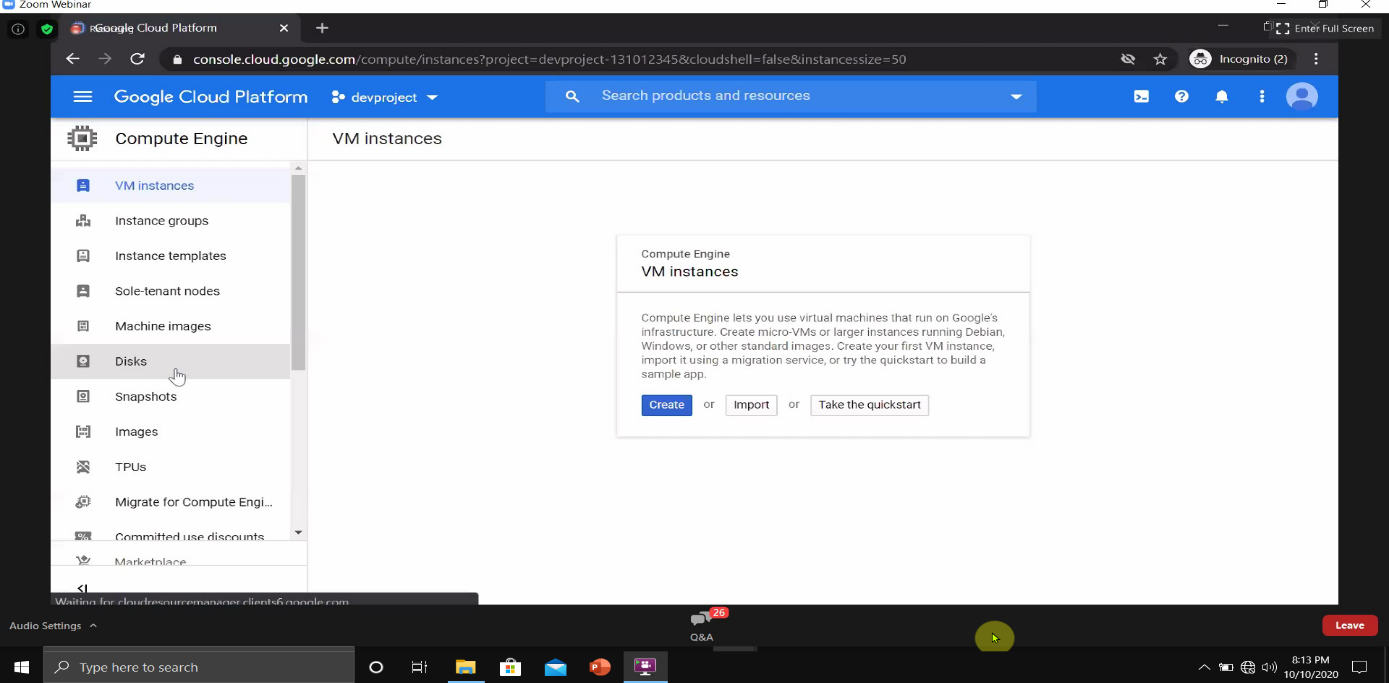
}

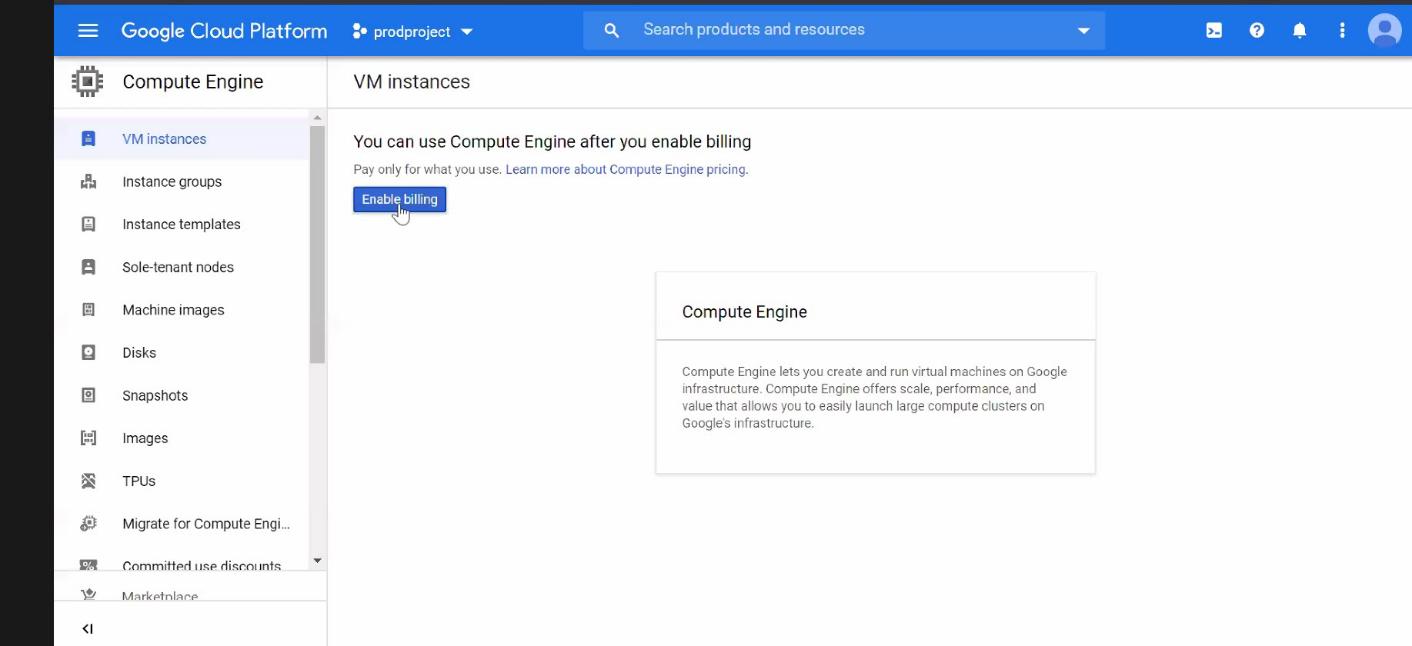
**3.Then for any compute engine you have to enable the api.**



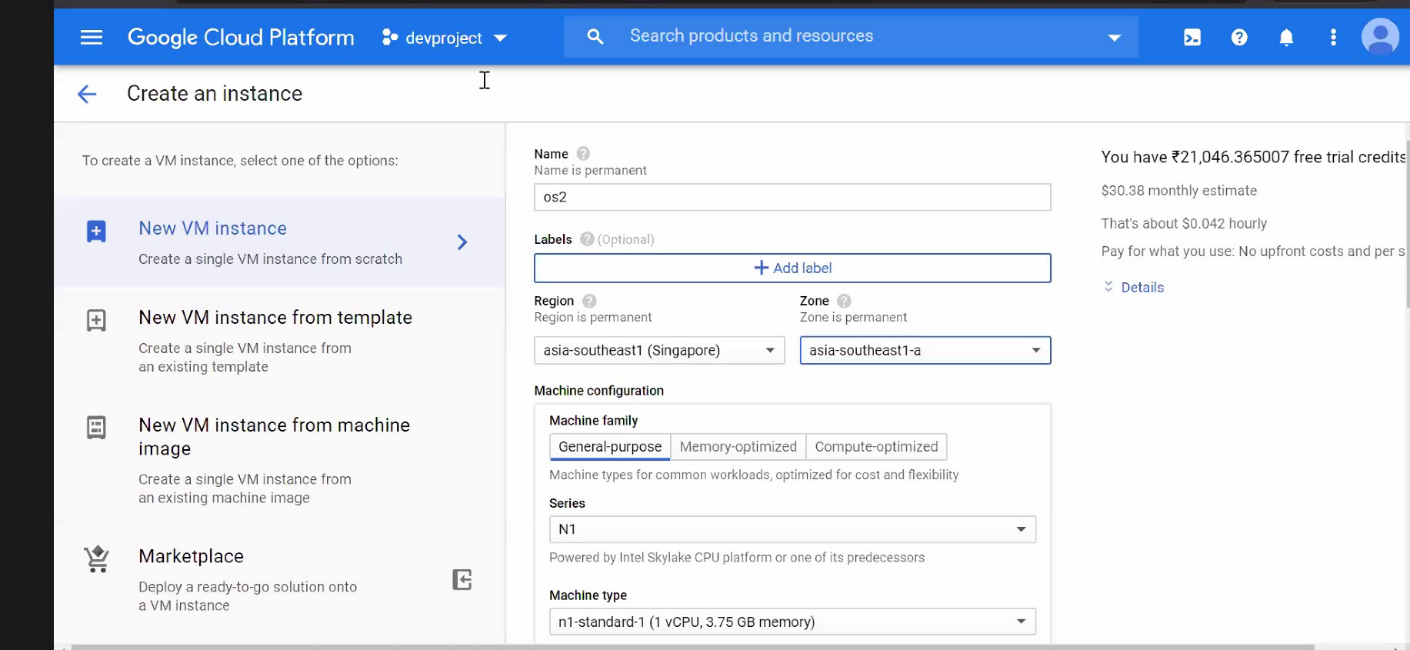
**4.Then we create the one devproject and one prodproject with enabled billing.So we can create the instances easily.**



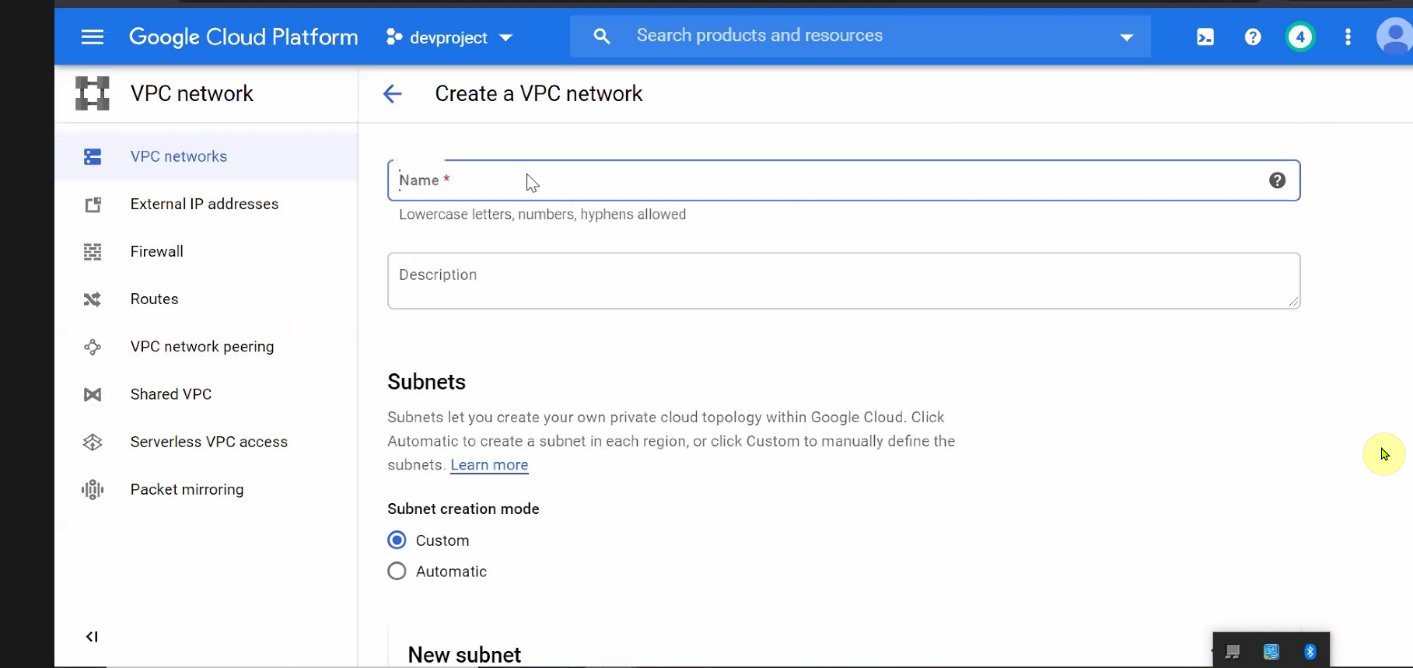




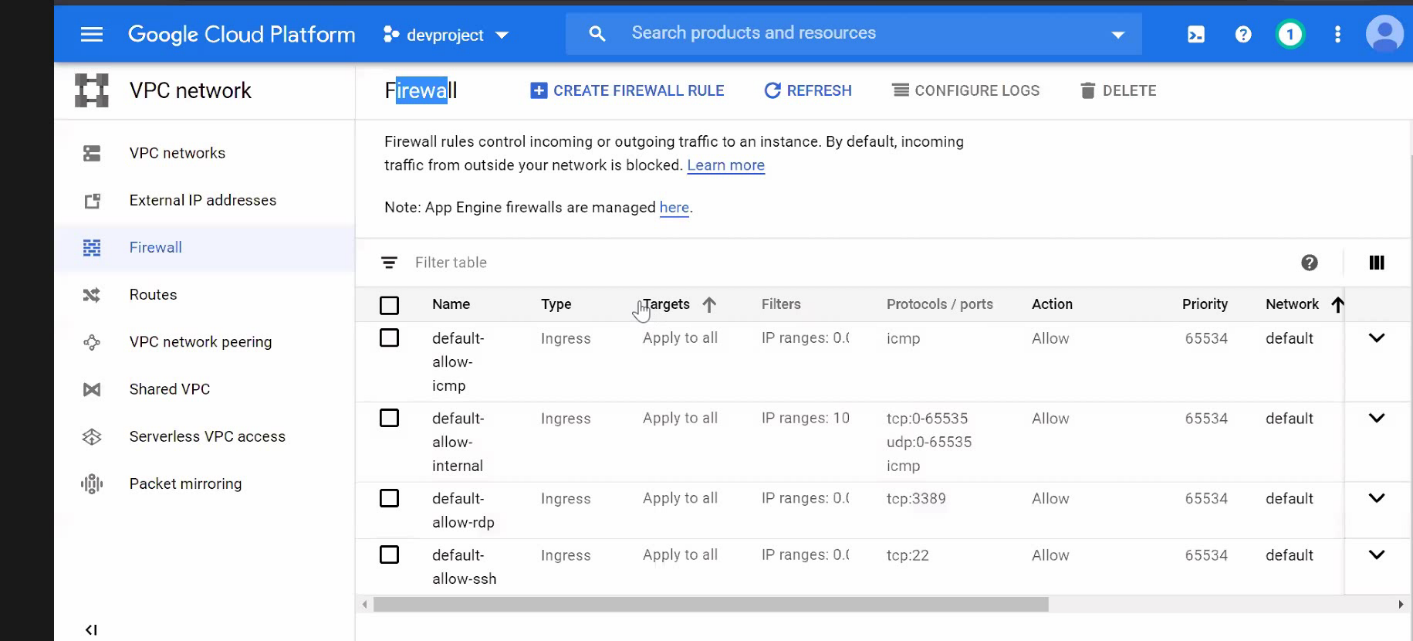
**5.Then we create the instance to launch the os.**

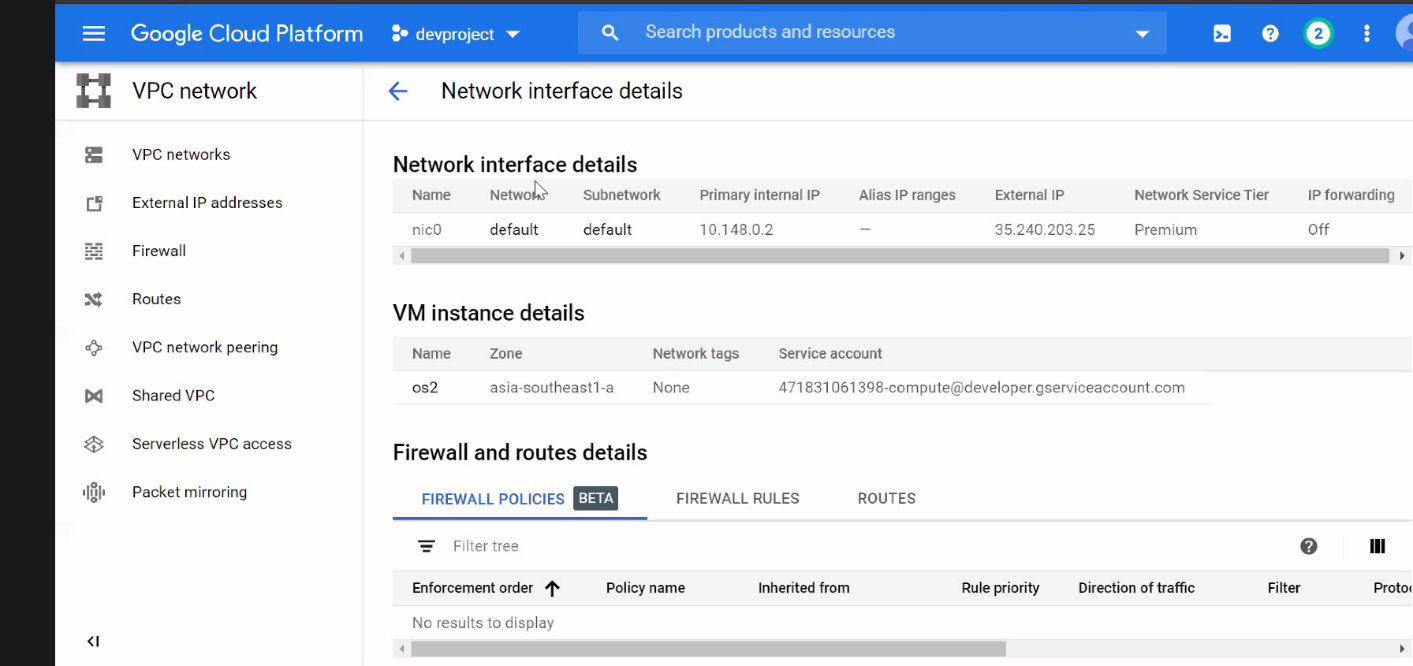


**6.Then we creating the vpc network for subnet.**

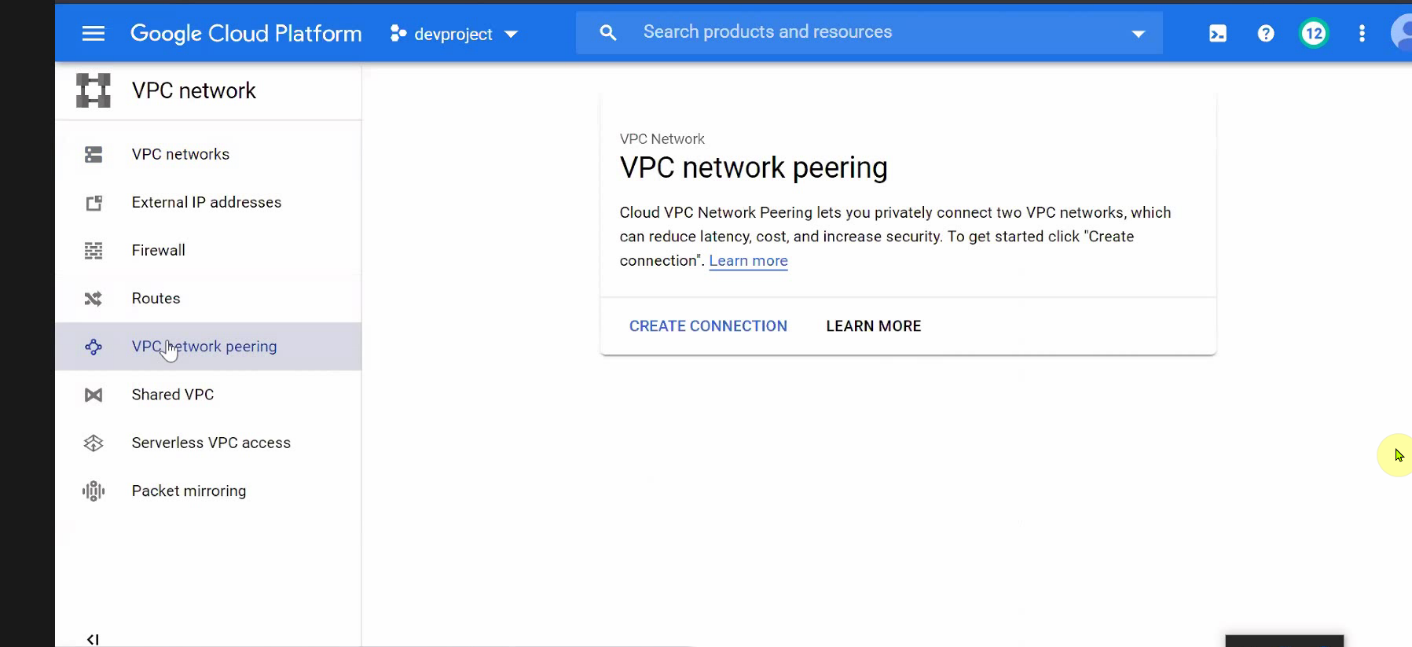


**7.Then we create firewall rule so that anyone can connect to anywhere to our os.**

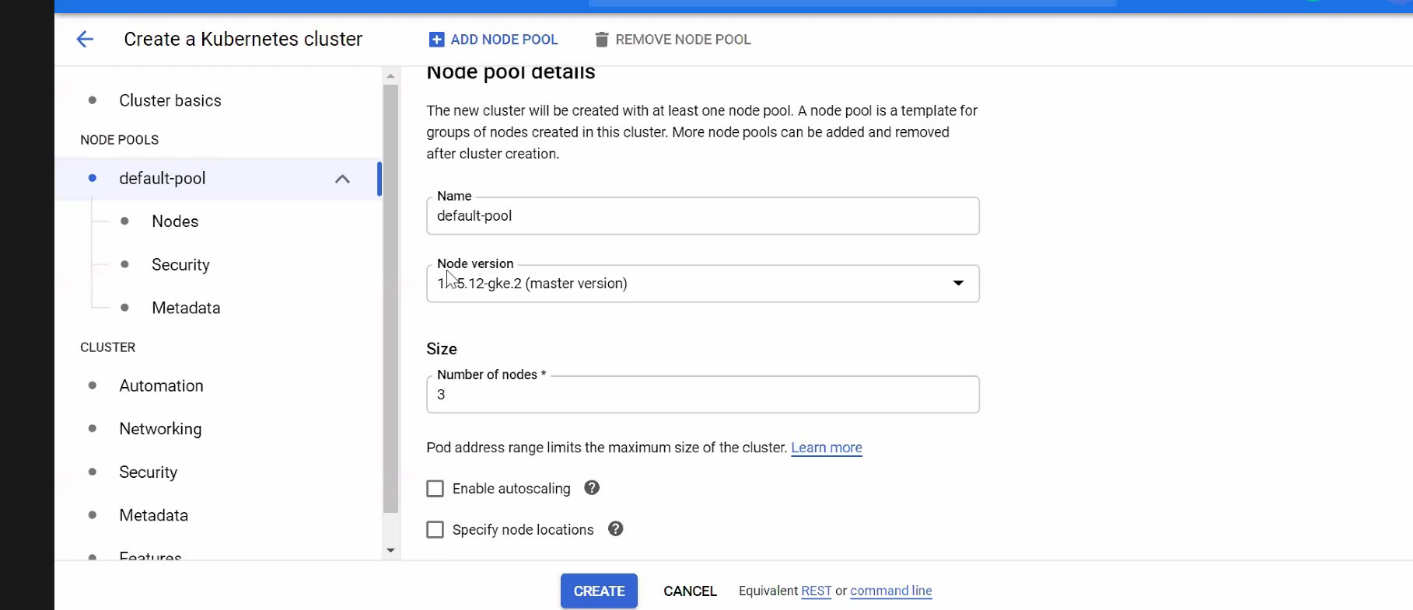


**8.Then we create the vpc network card.**

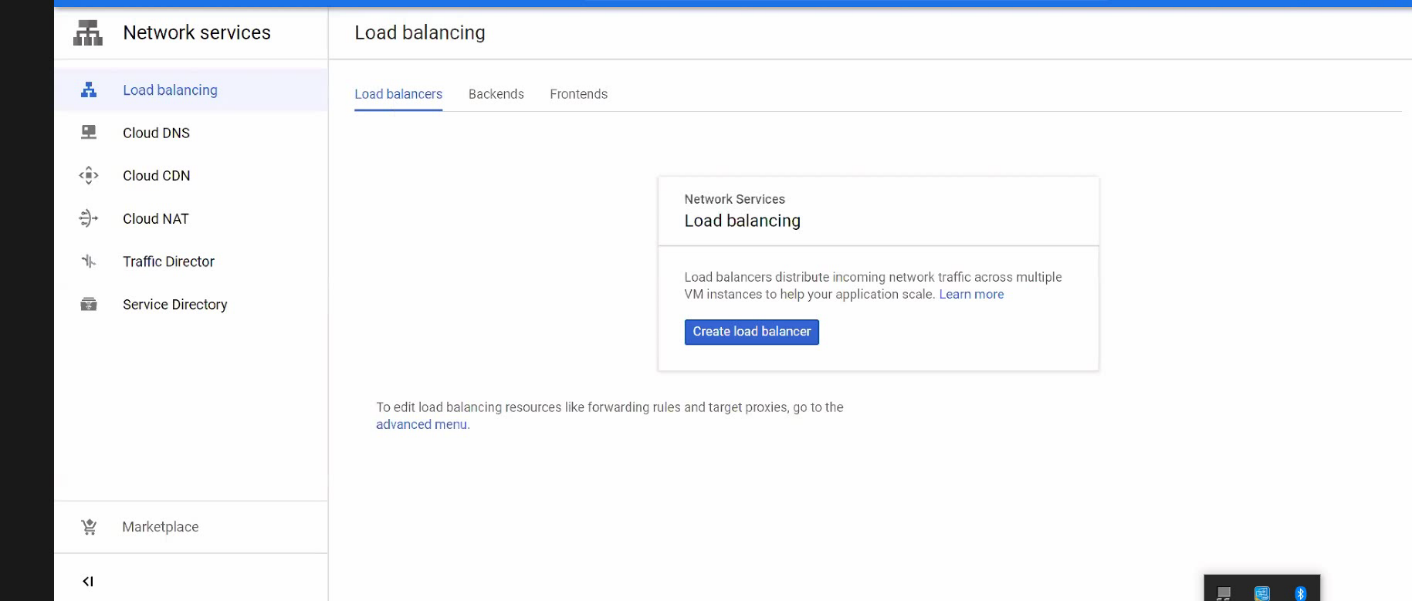
**9.Then we peering the vpc network for both the project.**



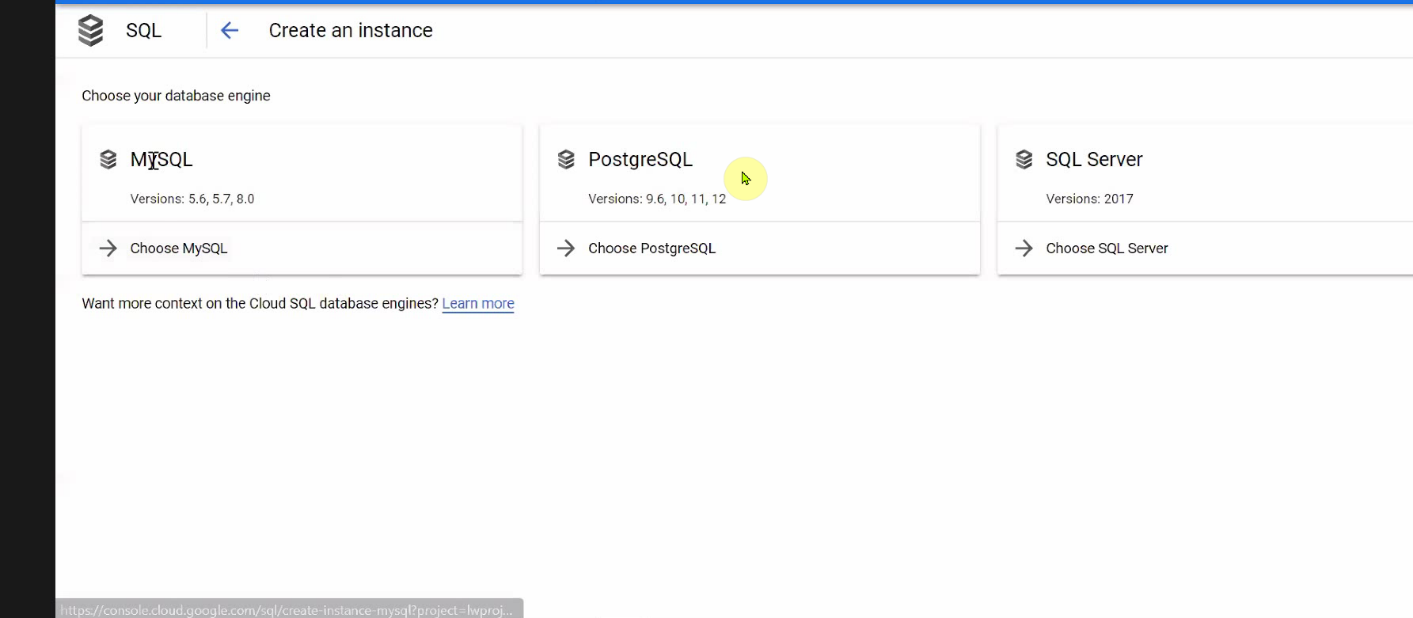
**10.Then we create the Kubernetes cluster for dev-project.**

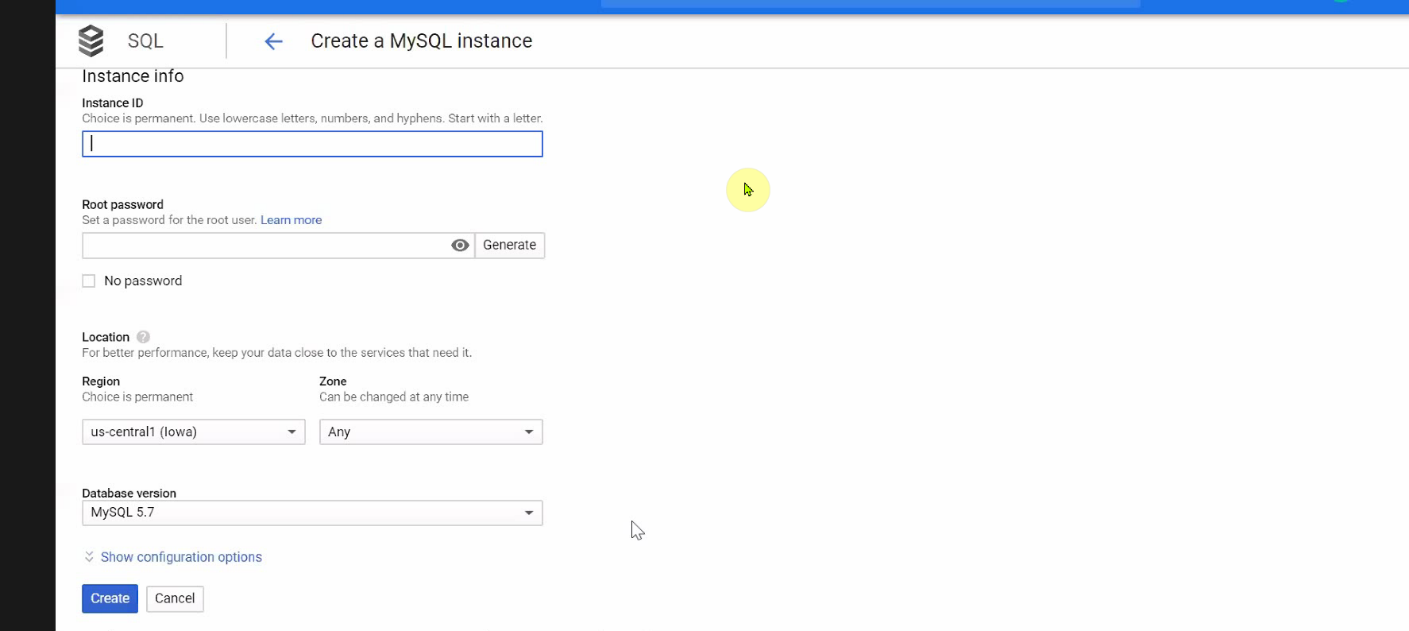


**11.Then we apply load balancing because of network traffic.**

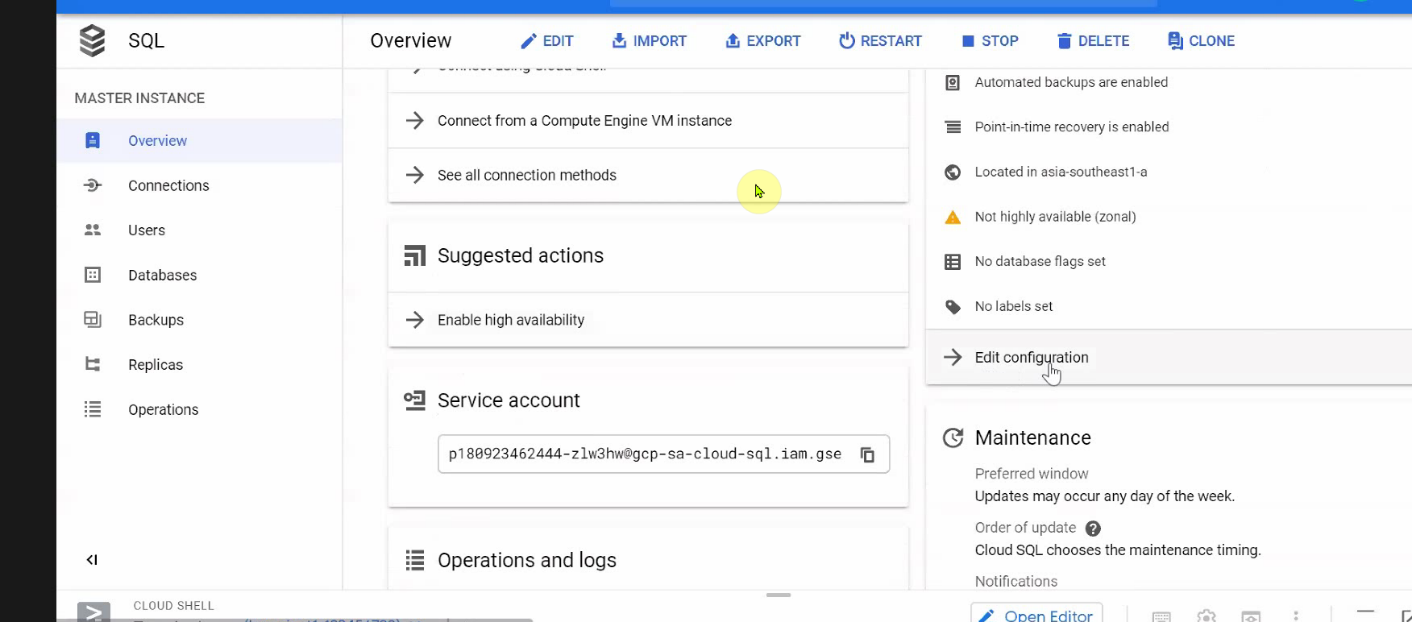


**12.Then we create the database for prod-project.**

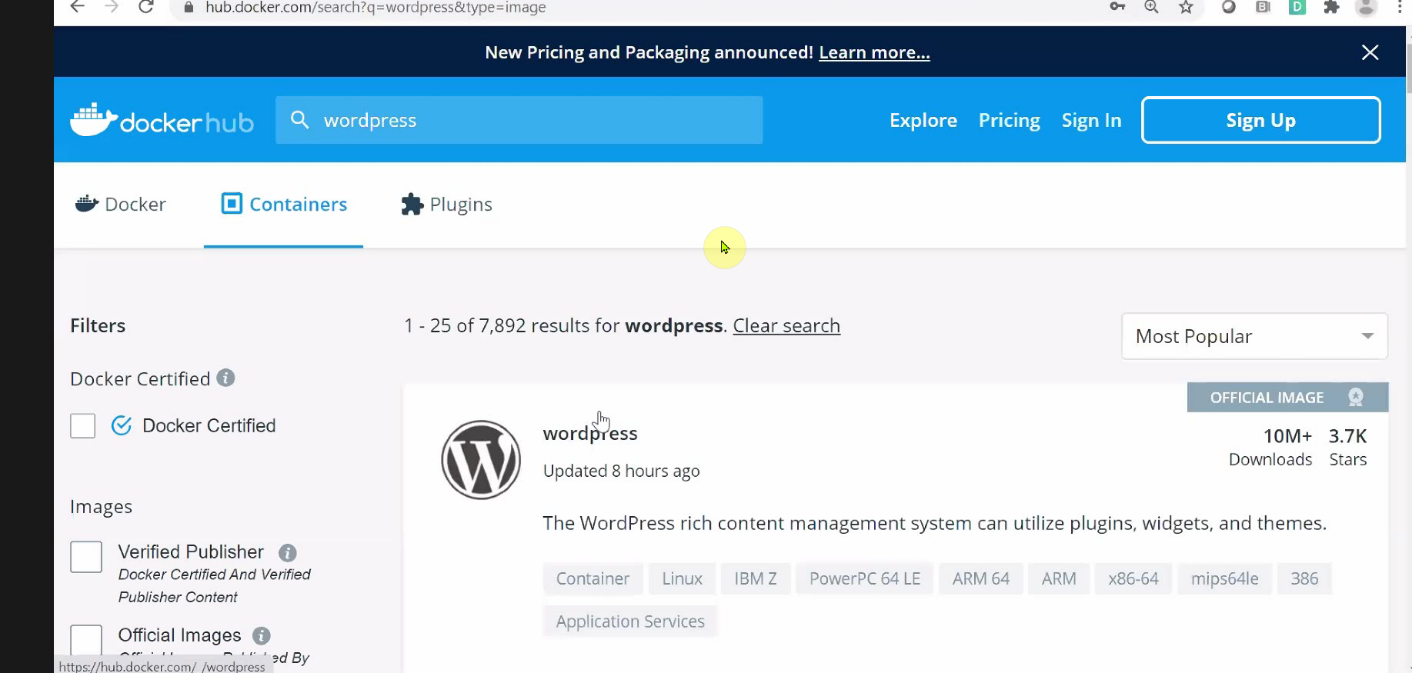




**13.Then we edit the mysql configuration.**



**14.At last we attach the image iso of wordpress to our sql so that we easily launch our website through webserver and then connect this mysql to Kubernetes engine in dev-project.**



**Here are the process of doing task.**

**variable devproject {**

**default = "dev-proj-7981"**

**}**

**variable prodproject {**

**default = "prod-proj-7981"**

**}**

**resource "google\_compute\_network" "vpc\_prodnetwork" {**

**name = "vpc\_network1"**

**project = var.prodproject**

**routing\_mode = "GLOBAL"**

**auto\_create\_subnetworks = false**

**}**

**resource "google\_compute\_network" "vpc\_devnetwork" {**

**name = "vpc\_network2"**

**project = var.devproject**

**routing\_mode = "GLOBAL"**

**auto\_create\_subnetworks = false**

**}**

**resource "google\_compute\_subnetwork" "dev-subnetwork" {**

**name = "mysubnet-2"**

**ip\_cidr\_range = "10.10.13.0/24"**

**region = "us-west1"**

**network = "${google\_compute\_network.vpc\_devnetwork.name}"**

**project = var.devproject**

**}**

**resource "google\_compute\_subnetwork" "prod-subnetwork" {**

**name = "mysubnet-2"**

**ip\_cidr\_range = "10.10.12.0/24"**

**region = "us-west1"**

**network = "${google\_compute\_network.vpc\_prodnetwork.name}"**

**project = var.prodproject**

**}**

**resource "google\_compute\_firewall" "prod\_firewall" {**

**name = "firewall-prod"**

**network = "${google\_compute\_network.vpc\_prodnetwork.name}"**

**project = var.prodproject**

**allow {**

**protocol = "icmp"**

**}**

**allow {**

**protocol = "tcp"**

**ports = ["80", "8080", "1000-2000","22"]**

**}**

**source\_tags = ["web"]**

**source\_ranges = ["0.0.0.0/0"]**

**}**

**resource "google\_compute\_firewall" "dev\_firewall" {**

**name = "firewall-dev"**

**network = "${google\_compute\_network.vpc\_devnetwork.name}"**

**project = var.devproject**

**allow {**

**protocol = "icmp"**

**}**

**allow {**

**protocol = "tcp"**

**ports = ["80", "8080", "1000-2000","22"]**

**}**

**source\_tags = ["web"]**

**source\_ranges = ["0.0.0.0/0"]**

**}**

**resource "google\_compute\_network\_peering" "peering1" {**

**name = "peering1"**

**network = "${google\_compute\_network.vpc\_prodnetwork.id}"**

**peer\_network = "${google\_compute\_network.vpc\_devnetwork.id}"**

**}**

**resource "google\_compute\_network\_peering" "peering2" {**

**name = "peering1"**

**network = "${google\_compute\_network.vpc\_devnetwork.id}"**

**peer\_network = "${google\_compute\_network.vpc\_prodnetwork.id}"**

**}**

**resource "google\_compute\_instance" "prod" {**

**name = "test"**

**machine\_type = "n1-standard-1"**

**zone = "us-west1-c"**

**project = var.prodproject**

**tags = ["foo", "bar"]**

**boot\_disk {**

**initialize\_params {**

**image = "debian-cloud/debian-9"**

**}**

**}**

**network\_interface {**

**network = "${google\_compute\_network.vpc\_prodnetwork.name}"**

**subnetwork = "${google\_compute\_subnetwork.prod-subnetwork.name}"**

**subnetwork\_project = "prod-proj-7981"**

**access\_config {**

**}**

**}**

**}**

**resource "google\_compute\_instance" "dev" {**

**name = "test1"**

**machine\_type = "n1-standard-1"**

**zone = "us-west1-c"**

**project = var.devproject**

**tags = ["foo", "bar"]**

**boot\_disk {**

**initialize\_params {**

**image = "debian-cloud/debian-9"**

**}**

**}**

**network\_interface {**

**network = "${google\_compute\_network.vpc\_devnetwork.name}"**

**subnetwork = "${google\_compute\_subnetwork.dev-subnetwork.name}"**

**subnetwork\_project = "dev-proj-7981"**

**access\_config {**

**}**

**}**

**}**

**resource "google\_container\_cluster" "primary" {**

**name = "marcellus-wallace"**

**location = "us-central1-a"**

**initial\_node\_count = 3**

**project = "dev-proj-7981"**

**master\_auth {**

**username = "username"**

**password = "pass"**

**client\_certificate\_config {**

**issue\_client\_certificate = false**

**}**

**}**

**node\_config {**

**oauth\_scopes = [**

**"https://www.googleapis.com/auth/logging.write",**

**"https://www.googleapis.com/auth/monitoring",**

**]**

**metadata = {**

**disable-legacy-endpoints = "true"**

**}**

**labels = {**

**app = "wordpress"**

**}**

**tags = ["website", "wordpress"]**

**}**

**timeouts {**

**create = "30m"**

**update = "40m"**

**}**

**}**

**resource "null\_resource" "nullremote1" {**

**depends\_on = [google\_container\_cluster.primary]**

**provisioner "local-exec" {**

**command = "gcloud container clusters get-credentials ${google\_container\_cluster.primary.name} --zone ${google\_container\_cluster.primary.location} --project ${google\_container\_cluster.primary.project}"**

**}**

**}**

**resource "kubernetes\_service" "example" {**

**depends\_on = [null\_resource.nullremote1]**

**metadata {**

**name = "loadbalancer"**

**}**

**spec {**

**selector = {**

**app = "${kubernetes\_pod.example.metadata.0.labels.app}"**

**}**

**session\_affinity = "ClientIP"**

**port {**

**port = 80**

**target\_port = 80**

**}**

**type = "LoadBalancer"**

**}**

**}**

**resource "kubernetes\_pod" "example" {**

**metadata {**

**name = "terraform-example"**

**labels = {**

**app = "MyApp"**

**}**

**}**

**spec {**

**container {**

**image = "wordpress:4.8-apache"**

**name = "mywp"**

**}**

**}**

**}**

**output "wordpressip" {**

**value = kubernetes\_service.example.load\_balancer\_ingress**

**}**

**resource "google\_sql\_database" "database" {**

**name = "my-database1"**

**instance = google\_sql\_database\_instance.instance.name**

**project = "prod-proj-7981"**

**}**

**resource "google\_sql\_database\_instance" "instance" {**

**name = "my-database-instance54"**

**database\_version = "MYSQL\_5\_6"**

**region = "us-central1"**

**project = "prod-proj-7981"**

**settings {**

**tier = "db-f1-micro"**

**ip\_configuration {**

**ipv4\_enabled = true**

**authorized\_networks {**

**name = "public network"**

**value = "0.0.0.0/0"**

**}**

**}**

**}**

**}**

**resource "google\_sql\_user" "users" {**

**name = "yogesh"**

**instance = google\_sql\_database\_instance.instance.name**

**project = "prod-proj-7981"**

**password = "redhat"**

**}**