

# **GCP TASK**

## **Google Cloud Platform**

Google Cloud Platform (GCP), offered by Google, is a suite of cloud computing services that runs on the same infrastructure that Google uses internally for its end-user products, such as Google Search.

Google Cloud Platform is a provider of computing resources for deploying and operating applications on the web. Its specialty is providing a place for individuals and enterprises to build and run software, and it uses the web to connect to the users of that software.

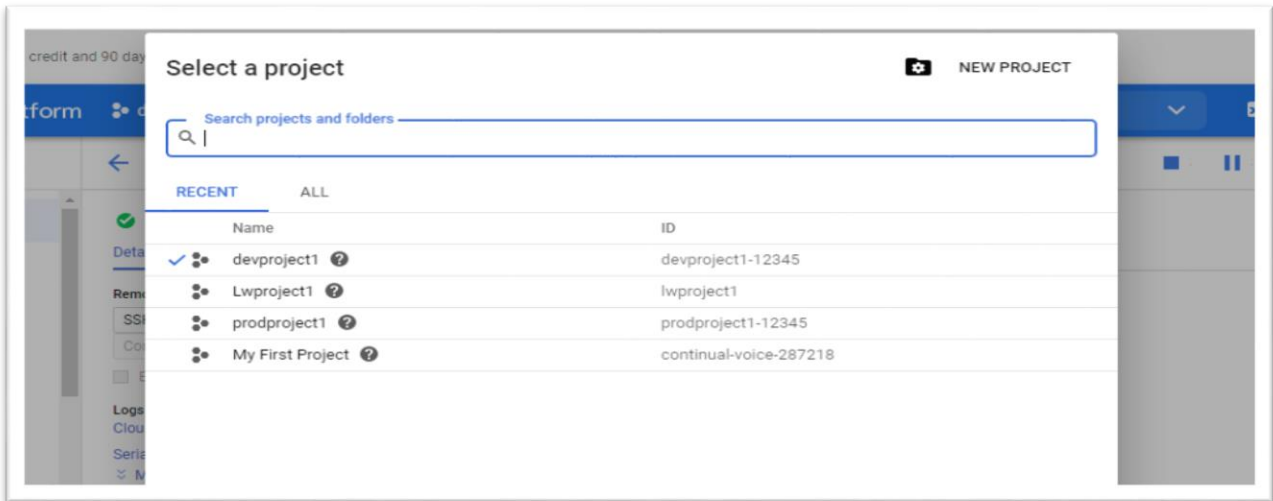
### **Task Description:-**

- Create two projects
- Enable API's
- Create VPC in both the projects in different- different regions
- Create subnets in both the VPC
- Do VPC peering for the connection
- Create Google Kubernetes Engine (GKE) in one VPC and launch cluster.
- Launch Wordpress on the top of that Kubernetes cluster.
- Create deployment which automatically will create a LoadBalancer for any disaster recovery.
- Launch SQL server in other VPC with MYSQL database.
- Then finally install wordpress in one VPC using running database in other PC.

### **Project Creation:-**

A project organizes all your Google Cloud resources. A project consists of a set of users; a set of API's; and billing authentication, and monitoring settings of those API's.

- Created 2 projects :—
  - devproject1
  - prodproject1



```
<|
```


```
CLOUD SHELL
Terminal (prodproject1-12345) x + v

Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to prodproject1-12345.
Use "gcloud config set project [PROJECT_ID]" to change to a different project.
chavi_kathunia@cloudshell:~ (prodproject1-12345)$ gcloud projects list
PROJECT_ID      NAME                PROJECT_NUMBER
continual-voice-287218  My First Project  216612814341
devproject1-12345      devproject1       937942376931
lwproject1           lwproject1        563633855664
prodproject1-12345     prodproject1      209282051880
chavi_kathunia@cloudshell:~ (prodproject1-12345)$
```

## Enabled API Services

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---



### Compute Engine API

Google

Compute Engine API

[MANAGE](#) [TRY THIS API](#) API Enabled

---

[OVERVIEW](#) [DOCUMENTATION](#) [SUPPORT](#)

```
CLOUD SHELL
Terminal (prodproject1-12345) x + v

To search the help text of gcloud commands, run:
gcloud help -- SEARCH_TERMS
chavi_kathunia@cloudshell:~ (prodproject1-12345)$ gcloud services list --project devproject1-12345
NAME                                     TITLE
bigquery.googleapis.com                 BigQuery API
bigquerystorage.googleapis.com           BigQuery Storage API
cloudapis.googleapis.com                 Google Cloud APIs
clouddebugger.googleapis.com             Cloud Debugger API
cloudtrace.googleapis.com                Cloud Trace API
compute.googleapis.com                   Compute Engine API
datastore.googleapis.com                  Cloud Datastore API
logging.googleapis.com                   Cloud Logging API
monitoring.googleapis.com                 Cloud Monitoring API
oslogin.googleapis.com                   Cloud OS Login API
servicemanagement.googleapis.com          Service Management API
serviceusage.googleapis.com               Service Usage API
sql-component.googleapis.com              Cloud SQL
storage-api.googleapis.com                Google Cloud Storage JSON API
storage-component.googleapis.com           Cloud Storage
storage.googleapis.com                    Cloud Storage API
chavi_kathunia@cloudshell:~ (prodproject1-12345)$
```

## Enable Billing

Google Cloud Platform

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Billing

Account management My Billing Account RENAME BILLING ACCOUNT CLOSE BILLING ACCOUNT SHOW INFO PANEL

Overview

Reports

Cost table

Cost breakdown

Commitments

Budgets & alerts

Billing export

Pricing

Documents

Transactions

Billing account ID: 018E87-BBD45A-5E1ED2  
Enabled Google service: Google Cloud Platform

Projects linked to this billing account

Project name	Project ID
prodproject1	prodproject1-12345
My First Project	continual-voice-287218
devproject1	devproject1-12345

Activate Windows

## Launched VM Instance for both the projects

Platform devproject1

Search products and resources

VM instances

MANAGE ACCESS SHOW INFO

Filter VM instances

Columns

Name	Zone	Recommendation	In use by	Internal IP	External IP	Connect
osdev1	asia-southeast1-a			10.0.1.2 (nic0)	34.87.77.157	SSH

Related Actions



## VPC Creation in other project :-

Google Cloud Platform

devproject1

Search products and resources

VPC network

VPC networks

CREATE VPC NETWORK

REFRESH

europa-west4	default	10.164.0.0/20	10.164.0.1	Off
europa-north1	default	10.166.0.0/20	10.166.0.1	Off
us-west2	default	10.168.0.0/20	10.168.0.1	Off
asia-east2	default	10.170.0.0/20	10.170.0.1	Off
europa-west6	default	10.172.0.0/20	10.172.0.1	Off
asia-northeast2	default	10.174.0.0/20	10.174.0.1	Off
asia-northeast3	default	10.178.0.0/20	10.178.0.1	Off
us-west3	default	10.180.0.0/20	10.180.0.1	Off
us-west4	default	10.182.0.0/20	10.182.0.1	Off
asia-southeast2	default	10.184.0.0/20	10.184.0.1	Off
vpcdevproject1	1	Custom	1	Off
asia-southeast1	lab1	10.0.1.0/24	10.0.1.1	Off

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## Set Firewall Rules For One Project :-

Google Cloud Platform

devproject1

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VPC network

Firewall

CREATE FIREWALL RULE

REFRESH

CONFIGURE LOGS

DELETE

VPC networks

External IP addresses

Firewall

Routes

VPC network peering

Shared VPC

Serverless VPC access

Packet mirroring

Firewall rules control incoming or outgoing traffic to an instance. By default, incoming traffic from outside your network is blocked. [Learn more](#)

Note: App Engine firewalls are managed [here](#).

Filter table

<input type="checkbox"/>	Name	Type	Targets	Filters	Protocols / ports	Action	Priority	Network	Logs
<input type="checkbox"/>	weballow	Ingress	Apply to all	IP ranges: 0.0.0.0/0	tcp:80	Allow	1000	default	Off
<input type="checkbox"/>	default-allow-icmp	Ingress	Apply to all	IP ranges: 0.0.0.0/0	icmp	Allow	65534	default	Off
<input type="checkbox"/>	default-allow-internal	Ingress	Apply to all	IP ranges: 10.0.0.0/8	tcp:0-65535 udp:0-65535 icmp	Allow	65534	default	Off
<input type="checkbox"/>	default-allow-rdp	Ingress	Apply to all	IP ranges: 0.0.0.0/0	tcp:3389	Allow	65534	default	Off
<input type="checkbox"/>	default-allow-ssh	Ingress	Apply to all	IP ranges: 0.0.0.0/0	tcp:22	Allow	65534	default	Off

## Set Firewall Rules For Other Project :-

Google Cloud Platform prodproject1 Search products and resources

VPC network Firewall [+ CREATE FIREWALL RULE](#) [REFRESH](#) [CONFIGURE LOGS](#) [DELETE](#)

traffic from outside your network is blocked. [Learn more](#)

Note: App Engine firewalls are managed [here](#).

Filter table

<input type="checkbox"/>	Name	Type	Targets	Filters	Protocols / ports	Action	Priority	Network	Logs	Hit
<input type="checkbox"/>	default-allow-icmp	Ingress	Apply to all	IP ranges: 0.0.0.0/0	icmp	Allow	65534	default	Off	
<input type="checkbox"/>	default-allow-internal	Ingress	Apply to all	IP ranges: 10.0.0.0/8	tcp:0-65535 udp:0-65535 icmp	Allow	65534	default	Off	
<input type="checkbox"/>	default-allow-rdp	Ingress	Apply to all	IP ranges: 0.0.0.0/0	tcp:3389	Allow	65534	default	Off	
<input type="checkbox"/>	default-allow-ssh	Ingress	Apply to all	IP ranges: 0.0.0.0/0	tcp:22	Allow	65534	default	Off	
<input type="checkbox"/>	myfirewall	Ingress	Apply to all	IP ranges: 0.0.0.0/0	all	Allow	1000	vpcprodproject1	Off	

Activate Windows

## VPC peering in one project :-

(8) WhatsApp x Google GCP x 23rdAug2020 x VPC network p x New Tab x You are now a x Authorizing C x LinkedIn x + -

console.cloud.google.com/networking/peering/list?project=prodproject1-12345&supportedpview=project

Free trial status: ₹21,354.06 credit and 90 days remaining - with a full account, you'll get unlimited access to all of Google Cloud Platform. [DISMISS](#) [ACTIVATE](#)

Google Cloud Platform prodproject1 Search products and resources

VPC network VPC network peering [+ CREATE PEERING CONNECTION](#) [REFRESH](#) [DELETE](#)

Filter table

<input type="checkbox"/>	Name	Your VPC network	Peered VPC network	Peered project ID	Status	Exchange custom routes
<input type="checkbox"/>	prodpeering	vpcprodproject1	vpcdevproject1	devproject1-12345	Active	None

## VPC peering in other project :-

Free trial status: ₹21,354.06 credit and 90 days remaining - with a full account, you'll get unlimited access to all of Google Cloud Platform. DISMISS ACTIV

Google Cloud Platform devproject1 Search products and resources

VPC network VPC network peering + CREATE PEERING CONNECTION REFRESH DELETE

Filter table

<input type="checkbox"/>	Name ↑	Your VPC network	Peered VPC network	Peered project ID	Status	Exchange custom routes
<input type="checkbox"/>	devpeering	vpcdevproject1	vpcprodproject1	prodproject1-12345	Active	None

VPC networks  
External IP addresses  
Firewall  
Routes  
VPC network peering  
Shared VPC

## External IP addresses of one project :-

Free trial status: ₹21,354.06 credit and 90 days remaining - with a full account, you'll get unlimited access to all of Google Cloud Platform. DISMISS ACTIV

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VPC network External IP addresses + RESERVE STATIC ADDRESS REFRESH RELEASE STATIC ADDRESS SHOW INFO PANE

Filter table

<input type="checkbox"/>	Name	External Address	Region	Type ↓	Version	In use by	Network Tier	Labels
<input type="checkbox"/>	-	34.87.77.157	asia-southeast1	Ephemeral	IPv4	VM instance osdev1 (Zone asia-southeast1-a)		

VPC networks  
External IP addresses  
Firewall  
Routes  
VPC network peering  
Shared VPC

## External IP addresses of other project :-

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VPC network External IP addresses + RESERVE STATIC ADDRESS REFRESH RELEASE STATIC ADDRESS SHOW INFO

Filter table

<input type="checkbox"/>	Name	External Address	Region	Type ↓	Version	In use by	Network Tier	Labels
<input type="checkbox"/>	-	35.185.52.34	us-east1	Ephemeral	IPv4	VM instance osprod1 (Zone us-east1-b)		

VPC networks  
External IP addresses  
Firewall  
Routes

```
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

chavi.kathunia@cloudshell:~ (prodproject1-12345)$ ping 35.185.52.34
PING 35.185.52.34 (35.185.52.34) 56(84) bytes of data.
64 bytes from 35.185.52.34: icmp_seq=1 ttl=53 time=228 ms
64 bytes from 35.185.52.34: icmp_seq=2 ttl=53 time=227 ms
64 bytes from 35.185.52.34: icmp_seq=3 ttl=53 time=228 ms
64 bytes from 35.185.52.34: icmp_seq=4 ttl=53 time=227 ms
64 bytes from 35.185.52.34: icmp_seq=5 ttl=53 time=227 ms
64 bytes from 35.185.52.34: icmp_seq=6 ttl=53 time=227 ms
64 bytes from 35.185.52.34: icmp_seq=7 ttl=53 time=227 ms
64 bytes from 35.185.52.34: icmp_seq=8 ttl=53 time=228 ms
64 bytes from 35.185.52.34: icmp_seq=9 ttl=53 time=227 ms
64 bytes from 35.185.52.34: icmp_seq=10 ttl=53 time=227 ms
64 bytes from 35.185.52.34: icmp_seq=11 ttl=53 time=227 ms
64 bytes from 35.185.52.34: icmp_seq=12 ttl=53 time=227 ms
64 bytes from 35.185.52.34: icmp_seq=13 ttl=53 time=228 ms
64 bytes from 35.185.52.34: icmp_seq=14 ttl=53 time=229 ms
64 bytes from 35.185.52.34: icmp_seq=15 ttl=53 time=227 ms
64 bytes from 35.185.52.34: icmp_seq=16 ttl=53 time=227 ms
```

## Already setup Google SDKInstaller in baseOS to run gcloud command from baseOS.

```
C:\Users\pc\AppData\Local\Google\Cloud SDK>gcloud init --skip-diagnostics
Welcome! This command will take you through the configuration of gcloud.

Settings from your current configuration [default] are:
core:
  account: chavi.kathunia
  disable_usage_reporting: 'True'

Pick configuration to use:
[1] Re-initialize this configuration [default] with new settings
[2] Create a new configuration
Please enter your numeric choice: [1]
Please enter a value between 1 and 2: 1

Your current configuration has been set to: [default]

You must log in to continue. Would you like to log in (Y/n)? Y

Your browser has been opened to visit:

  https://accounts.google.com/o/oauth2/auth?client_id=32555940559.apps.googleusercontent.com&redirect_uri=http%3A%2F%2Flocalhost%3A8085%2F&scope=openid+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fuserinfo.email+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fcloud-platform+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fappengine.admin+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fcompute+https%3A%2F%2Fwww.googleapis.com%2Fauth%2Faccounts.reauth&code_challenge=MvBa-CGYbs0DoxYtM0QHxQUHF7zQqs8icffEBAMo-2Q&code_challenge_method=S256&access_type=offline&response_type=code&prompt=select_account

Updates are available for some Cloud SDK components. To install them,
please run:
  $ gcloud components update

You are logged in as: [chavi.kathunia@gmail.com].

Pick cloud project to use:
[1] continual-voice-287218
[2] devproject1-12345
[3] lwproject1
[4] prodproject1-12345
[5] Create a new project
Please enter numeric choice or text value (must exactly match list)
```

Activate Windows  
Go to Settings to activate Windows.



```
Command Prompt
Microsoft Windows [Version 10.0.18362.1016]
(c) 2019 Microsoft Corporation. All rights reserved.

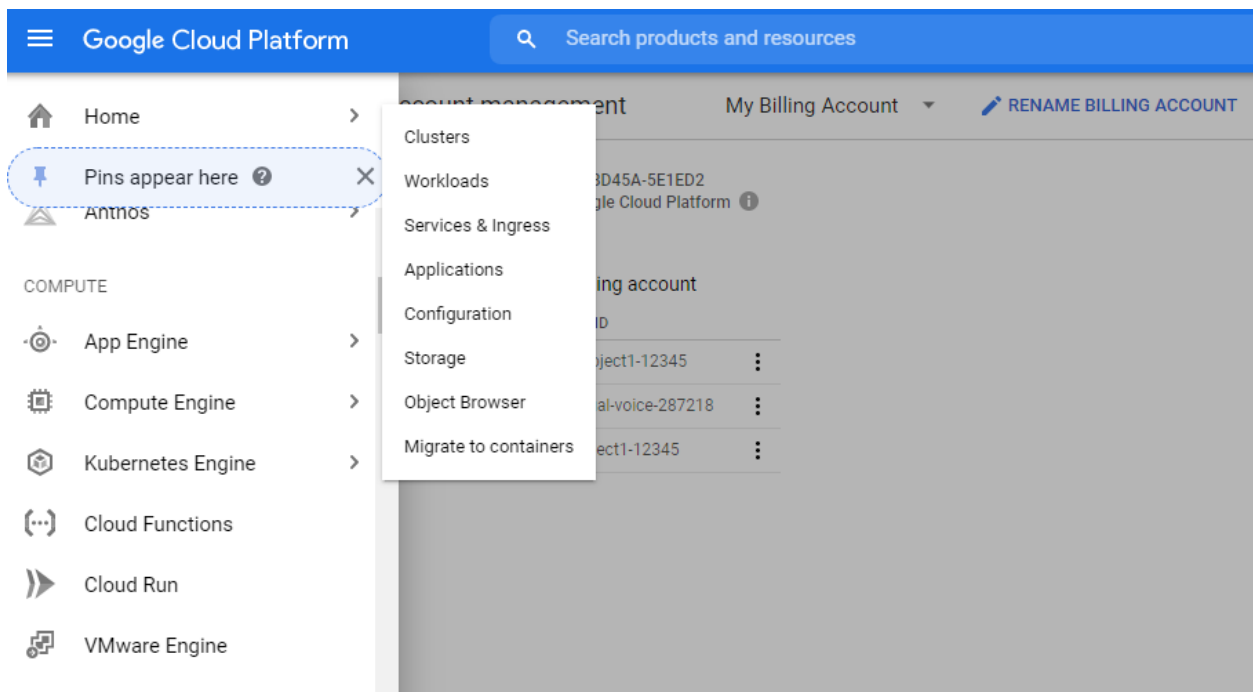
C:\Users\pc>gcloud projects list
PROJECT_ID          NAME                PROJECT_NUMBER
continual-voice-287218  My First Project  216612814341
devproject1-12345      devproject1       937942376931
lwproject1             lwproject1        563633855664
prodproject1-12345     prodproject1      209282051880

C:\Users\pc>
```

## Creation of GKE (Google Kubernetes Engine)

Google Kubernetes Engine (GKE) provides a managed environment for deploying, managing, and scaling your containerized applications using Google infrastructure.

### Creation of Cluster in US-east1 region



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Create a Kubernetes clusterADD NODE POOLREMOVE NODE POOL

Cluster basics

NODE POOLS

default-pool

Nodes

Security

Metadata

CLUSTER

Automation

Networking

Security

Name

prodcluster

Location type

Zonal

Regional

Region

us-east1

Specify default node locations

The same number of nodes will be deployed to each selected zone

us-east1-b

us-east1-c

us-east1-d

CREATE

CANCEL

Equivalent REST or command line

Activate Windows

Google Cloud Platformprodproject1Search products and resources

Create a Kubernetes clusterADD NODE POOLREMOVE NODE POOL

Cluster basics

NODE POOLS

default-pool

Nodes

Security

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Security

Specify default node locations

The same number of nodes will be deployed to each selected zone

us-east1-b

us-east1-c

us-east1-d

Master version

Choose Release Channel to get automatic GKE upgrades as new versions are ready. Choose a static version to upgrade manually in the future. [Learn more.](#)

Release channel

Static version

Static version

1.15.12-gke.2 (default)

CREATE

CANCEL

Equivalent REST or command line

Google Cloud Platformprodproject1Search products and resources

Create a Kubernetes clusterADD NODE POOLREMOVE NODE POOL

Cluster basics

NODE POOLS

default-pool

Nodes

Security

Metadata

CLUSTER

Automation

Networking

Security

groups of nodes created in this cluster. More node pools can be added and removed after cluster creation.

Name

default-pool

Node version

1.15.12-gke.2 (master version)

Size

Number of nodes (per zone) \*

1

Total (in all zones): 3

Pod address range limits the maximum size of the cluster. [Learn more](#)

☐ Enable autoscaling

☐ Specify node locations

CREATE

CANCEL

Equivalent [REST](#) or [command line](#)

Google Cloud Platformprodproject1Search products and resources

Create a Kubernetes clusterADD NODE POOLREMOVE NODE POOL

Cluster basics

NODE POOLS

default-pool

Nodes

Security

Metadata

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Automation

Networking

Security

Image type

Container-Optimized OS (cos) (default)

Machine Configuration

Machine family

GENERAL-PURPOSE

COMPUTE-OPTIMIZED

MEMORY-OPTIMIZED

Machine types for common workloads, optimized for cost and flexibility

Series

N1

Powered by Intel Skylake CPU platform or one of its predecessors

Machine type

n1-standard-1 (1 vCPU, 3.75 GB memory)

vCPU

1

Memory

3.75 GB

CREATE

CANCEL

Equivalent [REST](#) or [command line](#)

Google Cloud Platformprodproject1Search products and resources

Create a Kubernetes clusterADD NODE POOLREMOVE NODE POOL

Cluster basics

NODE POOLS

default-pool

Nodes

Security

Metadata

CLUSTER

Automation

Networking

Security

Networking

Define how applications in this cluster communicate with each other and with the Kubernetes control plane, and how clients can reach them.

Public cluster

Private cluster?

Network \*vpcprodproject1?

Node subnet \*lab2?

Advanced networking options

Enable VPC-native traffic routing (uses alias IP)?

CREATE

CANCEL

Equivalent [REST](#) or [command line](#)

Activate Window

Google Cloud Platformprodproject1Search products and resources

Create a Kubernetes clusterADD NODE POOLREMOVE NODE POOL

Cluster basics

NODE POOLS

default-pool

Nodes

Security

Metadata

CLUSTER

Automation

Networking

Security

Maximum Pods per node

110?

Mask for Pod address range per node: /24

Service address range?

Enable Intranode visibility?

Reveals your intranode traffic to Google's networking fabric. To get logs, you need to enable VPC flow logs in the [selected subnetwork](#).

Enable NodeLocal DNSCache Beta?

Enable HTTP load balancing?

Enable master authorized networks?

Enable network policy?

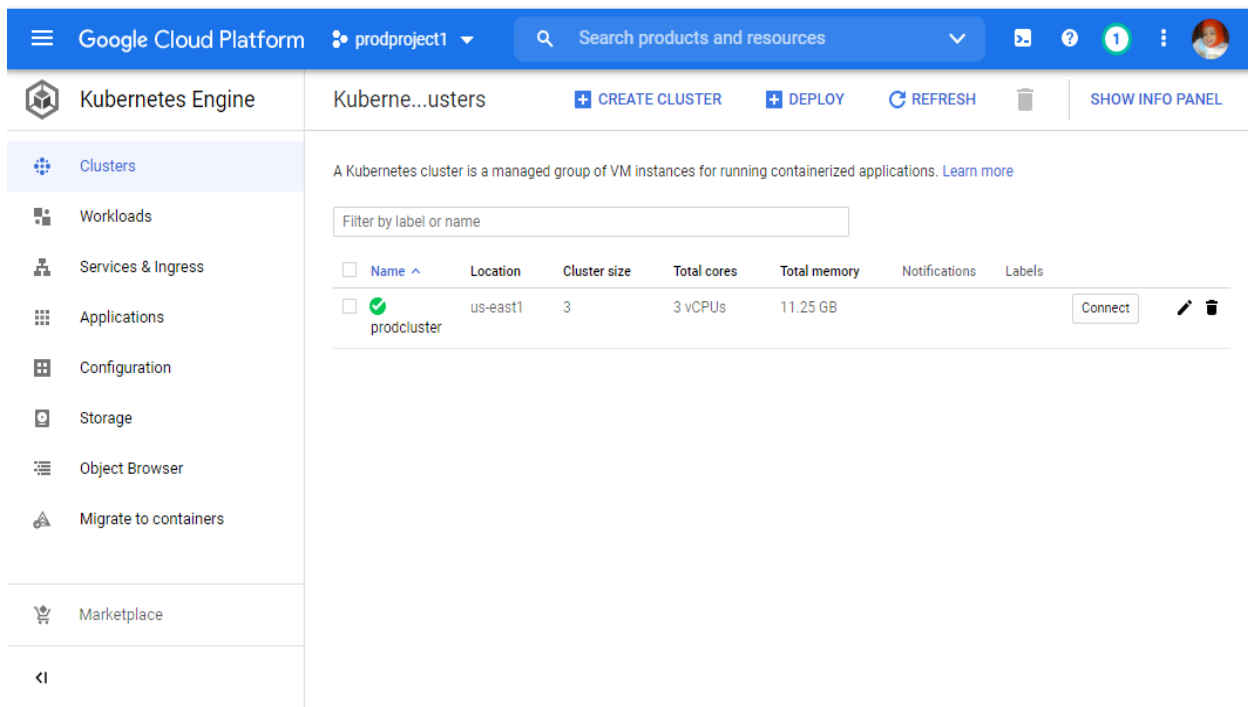
CREATE

CANCEL

Equivalent [REST](#) or [command line](#)

Activate W

**Here, Kubernetes cluster is launched :-**



**Now, we also can check this by using CLI from baseOS. First install kubectl components in command prompt**

```
Command Prompt
Microsoft Windows [Version 10.0.18362.1016]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\pc>gcloud projects list
PROJECT_ID      NAME                PROJECT_NUMBER
continual-voice-287218  My First Project  216612814341
devproject1-12345      devproject1       937942376931
lwproject1            lwproject1        563633855664
prodproject1-12345     prodproject1      209282051880

C:\Users\pc>gcloud container clusters get-credentials prodcluster --region us-east1 --project prodproject1
WARNING: Accessing a Kubernetes Engine cluster requires the kubernetes commandline
client [kubectl]. To install, run
  $ gcloud components install kubectl

Fetching cluster endpoint and auth data.
ERROR: (gcloud.container.clusters.get-credentials) ResponseError: code=403, message=Project lookup error: permission denied on resource 'projects/prodproject1' (or it may not exist).

C:\Users\pc>gcloud components install kubectl

Restarting command:
  $ gcloud components install kubectl

C:\Users\pc>
```

```
cmd.exe /c ""C:\Users\pc\AppData\Local\Temp\tmpdv3xz01d\python\python.exe" "-S" "C:\Users\pc\AppData\Local\Google\Cloud SDK\google-cloud-sdk\lib\gcloud.py" "components" "install" "kubect" & pause"

Your current Cloud SDK version is: 306.0.0
Installing components from version: 306.0.0

+-----+
|           These components will be installed.           |
+-----+
| Name          | Version    | Size    |
+-----+
| kubectl       | 1.15.11    | < 1 MiB |
| kubectl       | 1.15.11    | 84.5 MiB |
+-----+

For the latest full release notes, please visit:
https://cloud.google.com/sdk/release\_notes

Do you want to continue (Y/n)? Y

#####
## Creating update staging area          ##
#####
```

```
Command Prompt

Fetching cluster endpoint and auth data.
ERROR: (gcloud.container.clusters.get-credentials) ResponseError: code=403, message=Project lookup error: permission denied on resource 'projects/prodproject1' (or it may not exist).

C:\Users\pc>gcloud components install kubectl

Restarting command:
$ gcloud components install kubectl

C:\Users\pc>gcloud container clusters get-credentials prodcluster --region us-east1 --project prodproject1
WARNING: Accessing a Kubernetes Engine cluster requires the kubernetes commandline client [kubectl]. To install, run
$ gcloud components install kubectl

Fetching cluster endpoint and auth data.
ERROR: (gcloud.container.clusters.get-credentials) ResponseError: code=403, message=Project lookup error: permission denied on resource 'projects/prodproject1' (or it may not exist).

C:\Users\pc>gcloud container clusters get-credentials prodcluster --region us-east1 --project prodproject1
Fetching cluster endpoint and auth data.
ERROR: (gcloud.container.clusters.get-credentials) ResponseError: code=403, message=Project lookup error: permission denied on resource 'projects/prodproject1' (or it may not exist).

C:\Users\pc>gcloud container clusters get-credentials prodcluster --region us-east1 --project prodproject1-12345
Fetching cluster endpoint and auth data.
kubeconfig entry generated for prodcluster.

C:\Users\pc>kubectl get pods
No resources found in default namespace.

C:\Users\pc>kubectl get nodes
NAME                                STATUS    ROLES    AGE   VERSION
gke-prodcluster-default-pool-1c4cdde8-nns4    Ready    <none>    67m   v1.15.12-gke.2
gke-prodcluster-default-pool-98063668-pw59    Ready    <none>    67m   v1.15.12-gke.2
gke-prodcluster-default-pool-fed3066f-kckn    Ready    <none>    67m   v1.15.12-gke.2

C:\Users\pc>

Activate Windows
Go to Settings to activate Windows.
```

```
C:\Users\pc>gcloud container clusters get-credentials prodcluster --region us-east1 --project prodproject1-12345
Fetching cluster endpoint and auth data.
kubeconfig entry generated for prodcluster.

C:\Users\pc>kubectl get pods
No resources found in default namespace.

C:\Users\pc>kubectl get nodes
NAME                                STATUS    ROLES    AGE   VERSION
gke-prodcluster-default-pool-1c4cdde8-nns4    Ready    <none>    67m   v1.15.12-gke.2
gke-prodcluster-default-pool-98063668-pw59    Ready    <none>    67m   v1.15.12-gke.2
gke-prodcluster-default-pool-fed3066f-kckn    Ready    <none>    67m   v1.15.12-gke.2
```

**Now launching wordpress on the top of this kubernetes cluster:-**

```
C:\Users\pc>kubectl get service
NAME         TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)    AGE
kubernetes   ClusterIP   10.132.0.1    <none>         443/TCP    69m

C:\Users\pc>kubectl create deployment wp --image=wordpress
deployment.apps/wp created

C:\Users\pc>kubectl get pods
NAME                READY   STATUS    RESTARTS   AGE
wp-f96954c76-869vj  1/1     Running   0           21s
```

**At that moment there is no LoadBalancer, but as soon as you expose the pod running on the top of kubernetes cluster, a LoadBalancer will create automatically**

```
C:\Users\pc>kubectl expose deployment wp --type=LoadBalancer --port=80
service/wp exposed

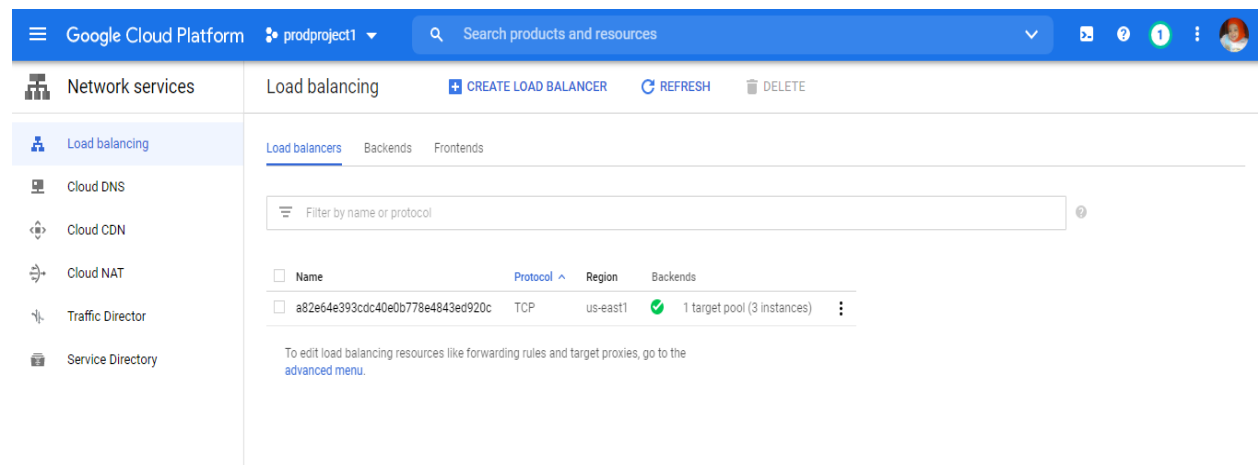
C:\Users\pc>kubectl get service
NAME         TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)    AGE
kubernetes   ClusterIP   10.132.0.1    <none>         443/TCP    74m
wp           LoadBalancer 10.132.3.162  <pending>     80:31310/TCP 13s

C:\Users\pc>kubectl get service
NAME         TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)    AGE
kubernetes   ClusterIP   10.132.0.1    <none>         443/TCP    74m
wp           LoadBalancer 10.132.3.162  <pending>     80:31310/TCP 33s

C:\Users\pc>kubectl get pods -o wide
NAME                READY   STATUS    RESTARTS   AGE   IP            NODE                                     NOMINATED NODE   READINESS GATES
wp-f96954c76-869vj  1/1     Running   0           4m28s  10.128.2.5    gke-prodcluster-default-pool-98063668-pw59  <none>           <none>
```

Activate Windows  
Go to Settings to activate Windows

**LoadBalancer is created**



## Creation of SQL server in asia-southeast1 region in other project

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SQL Instances

Cloud SQL

### Cloud SQL Instances

Cloud SQL instances are fully managed, relational MySQL, PostgreSQL, and SQL Server databases. Google handles replication, patch management, and database management to ensure availability and performance. [Learn more](#)

To get started with Cloud SQL, you can create a new instance or use Cloud SQL to migrate your SQL database to Google Cloud.

[CREATE INSTANCE](#) [MIGRATE DATA](#)

Google Cloud Platform prodproject1 Search products and resources

SQL Create an instance

Choose your database engine

MySQL

Versions: 5.6, 5.7, 8.0

→ Choose MySQL

PostgreSQL

Versions: 9.6, 10, 11, 12

→ Choose PostgreSQL

SQL Server

Versions: 2017

→ Choose SQL Server

Want more context on the Cloud SQL database engines? [Learn more](#)

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SQL Create a MySQL instance

mydb

**Root password**  
Set a password for the root user. [Learn more](#)

••••• [Generate](#)

☐ No password

**Location** ⓘ  
For better performance, keep your data close to the services that need it.

**Region**  
Choice is permanent

**Zone**  
Can be changed at any time

asia-southeast1 (Singapore) asia-southeast1-c

**Database version**  
MySQL 5.7

⌵ Show configuration options

[Create](#) [Cancel](#)

Activate Windows



Here, MySQL Database is created :-

The screenshot shows the Google Cloud Platform console for a project named 'devproject1'. The left sidebar is expanded to the 'SQL' section, and the 'Users' page is selected. The main content area shows the 'mydb' instance (MySQL 5.7) with a green status icon. Below the instance name, there is a link to 'Learn more' about user accounts. A table lists the current users:

User name	Host name
mysql.sys	localhost
root	% (any host)

Added a user to that database :-

This screenshot is similar to the previous one, but it shows an additional user, 'ekta', added to the 'mydb' instance. The table of users now includes:

User name	Host name
ekta	% (any host)
mysql.sys	localhost
root	% (any host)

Here, we can access the database :-

```
CLOUD SHELL
Terminal (devproject1-12345) x + v

Connecting to database with SQL user [root].Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 2003
Server version: 5.7.25-google-log (Google)


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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

## MYSQL commands :-




CLOUD SHELL

Terminal (devproject1-12345) x + ▾

```
mysql> show databases
-> ;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
4 rows in set (0.00 sec)

mysql>
```



CLOUD SHELL

Terminal (devproject1-12345) x + ▾

```
| performance_schema |
| sys |
+-----+
4 rows in set (0.00 sec)

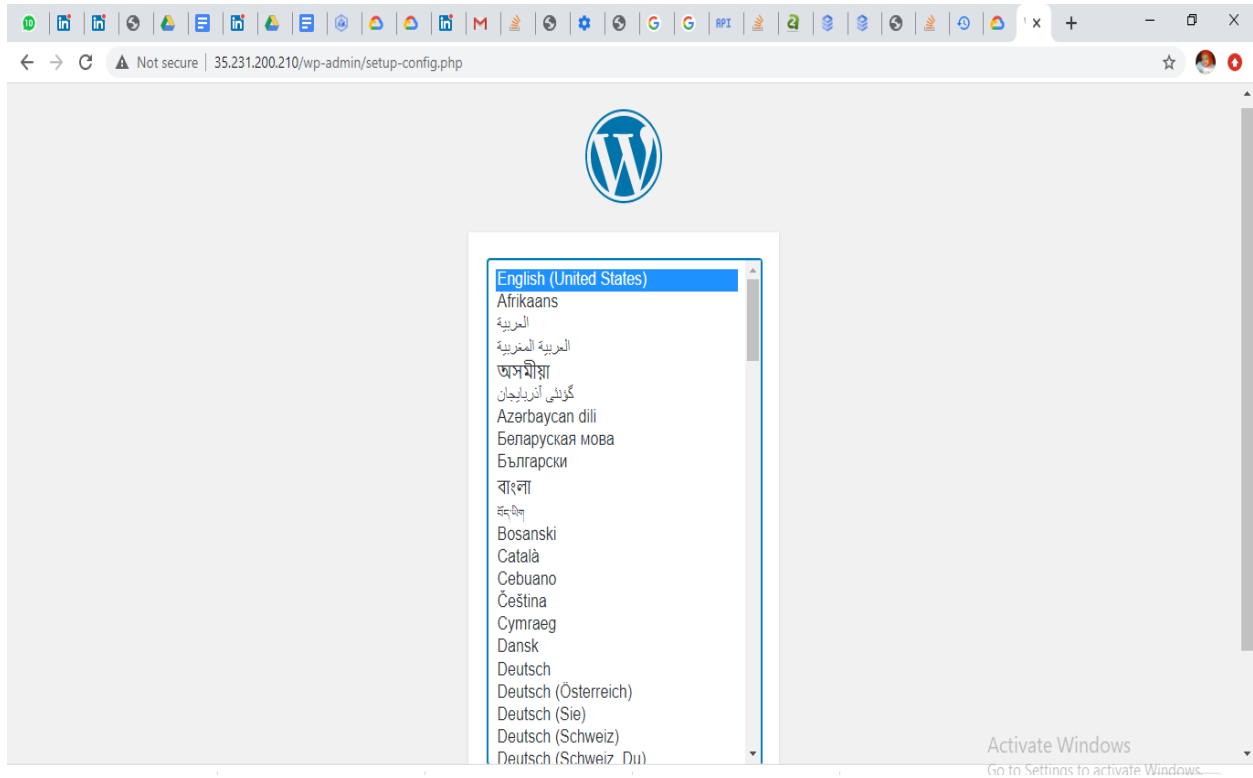
mysql> create database mydb1;
Query OK, 1 row affected (0.00 sec)

mysql> use mydb1
Database changed
mysql> show tables;
Empty set (0.00 sec)

mysql>
```

<https://console.cloud.google.com/sql/instances/mydb/overview?project=devproje...>

## Wordpress installation and database attachment part:-



Google Cloud Platform devproject1									
Search products and resources									
SQL Instances + CREATE INSTANCE MIGRATE DATA SHOW INFO PANEL									
Filter tree									
Instance ID	Type	Public IP address	Private IP address	Instance connection name	High availability	Location	Storage used		
mydb	MySQL 5.7	35.247.160.131		devproject1-12345.a...	ADD	asia-southeast1-c	1 GB of 10 GB		

← → ↻ console.cloud.google.com/sql/instances/mydb/connections?project=devproject1-12345

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SQL

MASTER INSTANCE

- Overview
- Connections
- Users
- Databases
- Backups
- Replicas
- Operations

Connections

allow. Clients still need valid credentials to successfully log in to your instance.

**Authorized networks**  
Authorize a network or use a Proxy to connect to your instance. Networks will only be authorized via these addresses. [Learn more](#)

allow all (0.0.0.0/0)

+ Add network

Save Discard changes


**App Engine authorization**  
All apps in this project are authorized by default. To authorize apps in other projects, follow the steps below.

✓ Apps in this project: All authorized.

Authorize apps in other projects

Update finished ✕

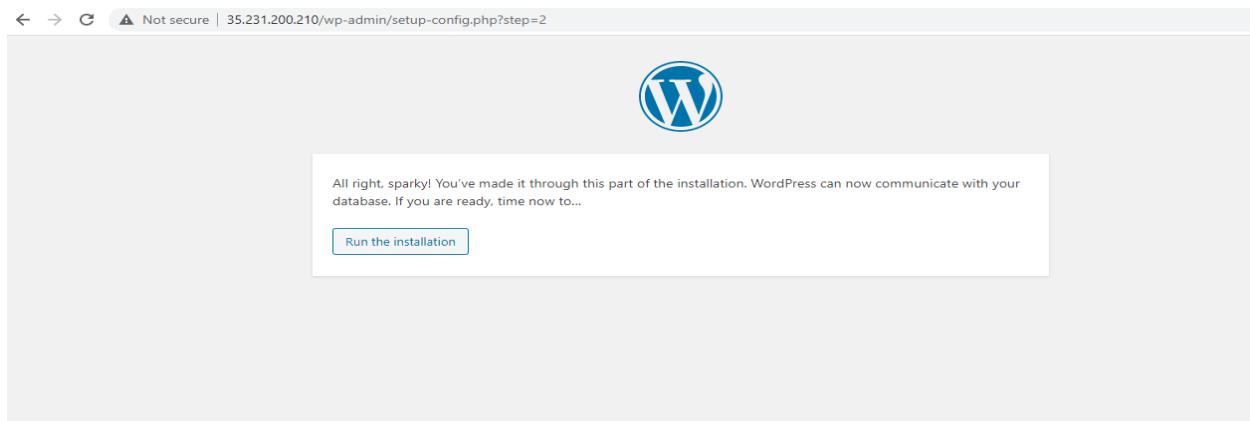
← → ↻ Not secure | 35.231.200.210/wp-admin/setup-config.php?step=1



Below you should enter your database connection details. If you're not sure about these, contact your host.

Database Name	<input type="text" value="mydb1"/>	The name of the database you want to use with WordPress.
Username	<input type="text" value="ekta"/>	Your database username.
Password	<input type="password" value="ekta"/>	Your database password.
Database Host	<input type="text" value="35.247.160.131"/>	You should be able to get this info from your web host, if localhost doesn't work.
Table Prefix	<input type="text" value="wp_"/>	If you want to run multiple WordPress installations in a single database, change this.

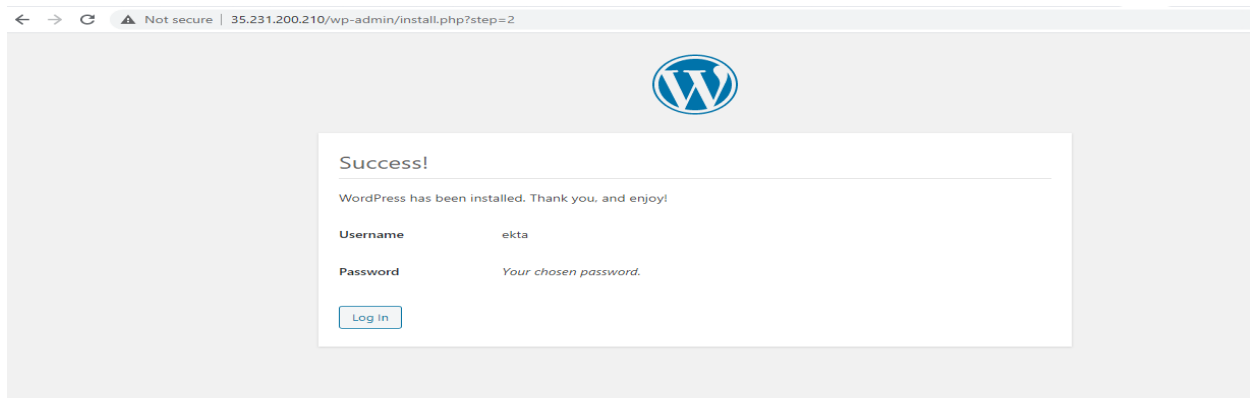
Submit

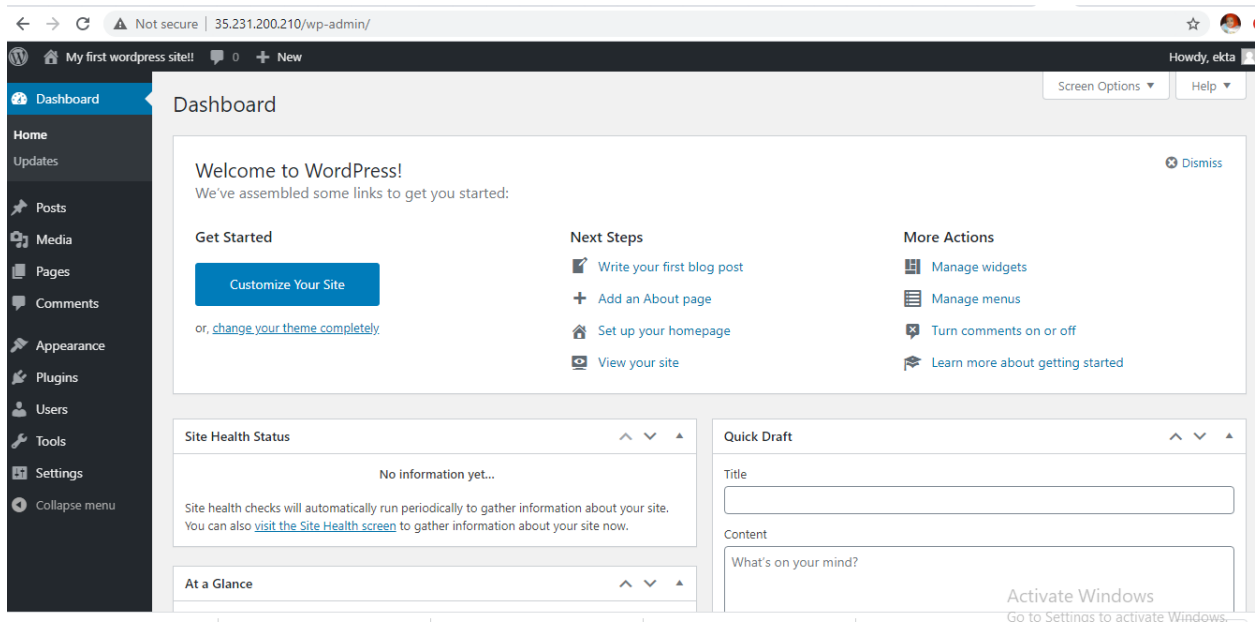
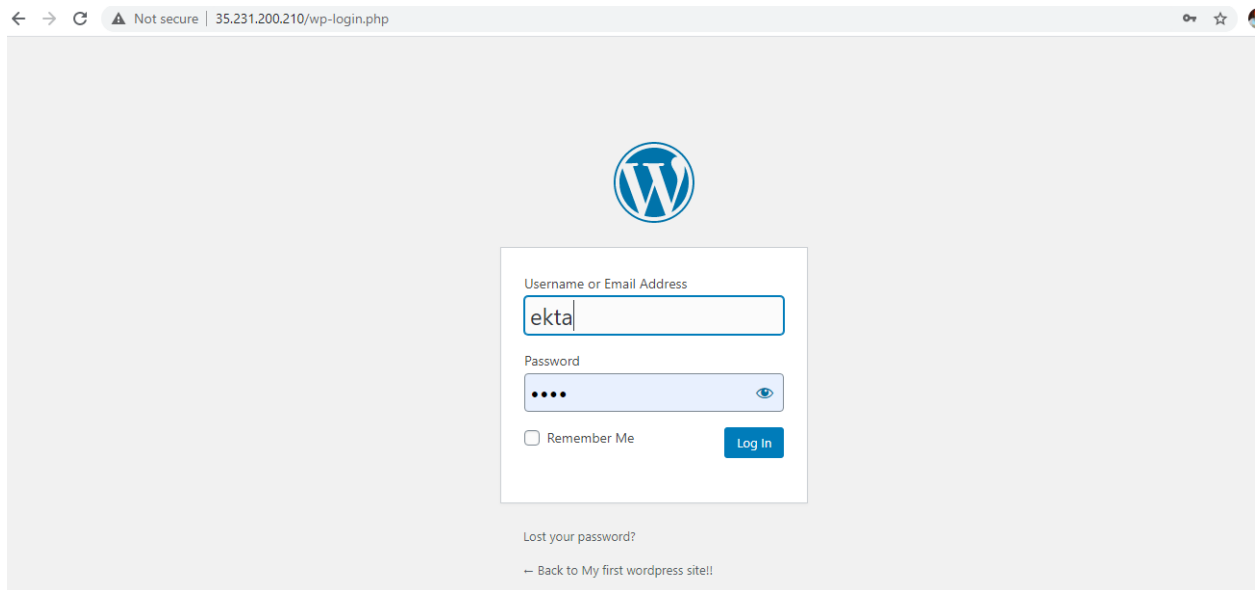


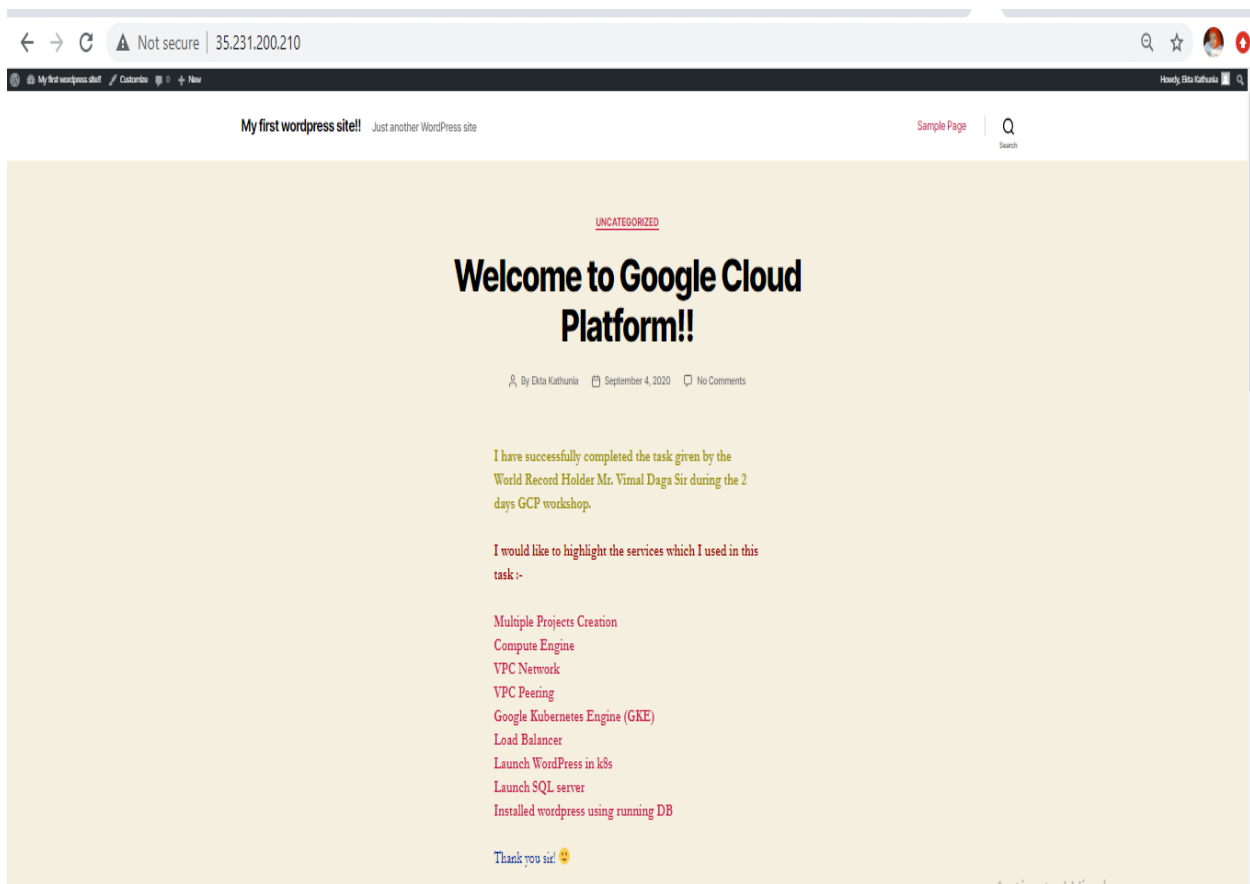
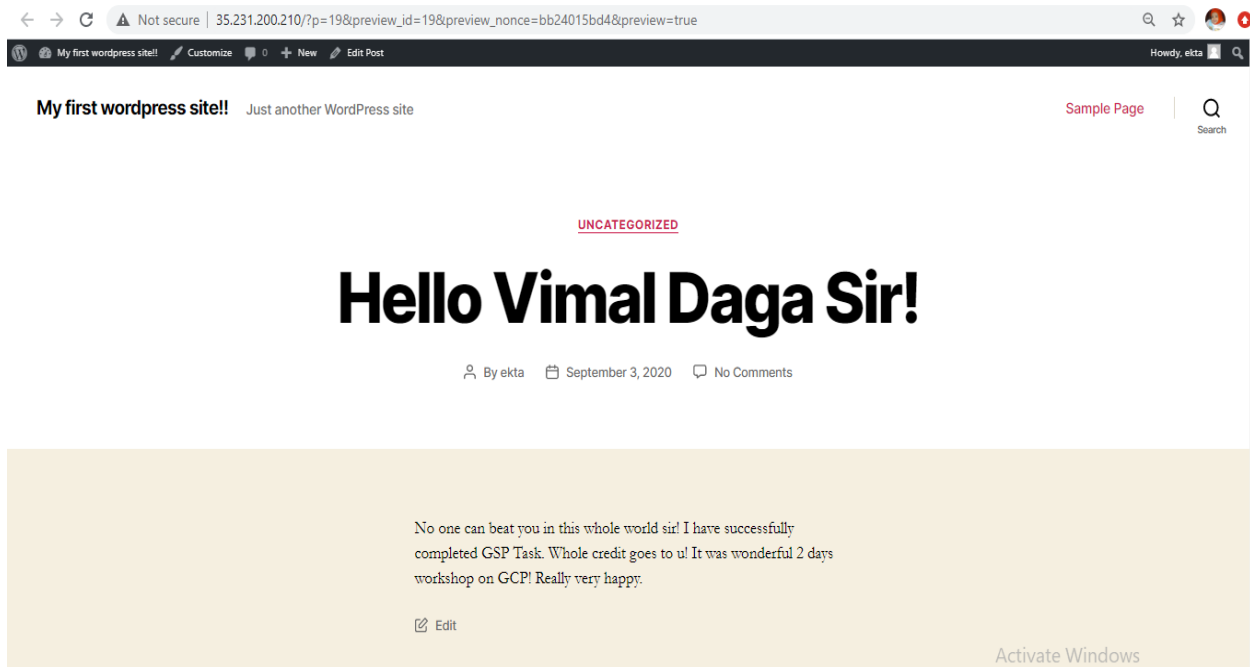
This screenshot displays the WordPress installation configuration screen. The browser's address bar shows the URL 35.231.200.210/wp-admin/install.php?language=en\_US. The page prompts the user to provide the following information, noting that settings can be changed later:

- Site Title:** My first wordpress site!!
- Username:** ekta. A note specifies: "Usernames can have only alphanumeric characters, spaces, underscores, hyphens, periods, and the @ symbol."
- Password:** A password field with a "Show" button. The password strength is indicated as "Very weak". An important note states: "Important: You will need this password to log in. Please store it in a secure location."
- Confirm Password:** A checkbox labeled "Confirm use of weak password" is checked.
- Your Email:** ekta.kathunia@gmail.com. A note says: "Double-check your email address before continuing."
- Search engine visibility:** A checkbox labeled "Discourage search engines from indexing this site" is unchecked. A note states: "It is up to search engines to honor this request."

An "Install WordPress" button is located at the bottom left of the form. An "Activate Windows" watermark is visible in the bottom right corner of the browser window.







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SQL Users

CLOUD SHELL Terminal (devproject1-12345) x +

Open Editor

```
mysql> use mydb1;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> show tables;
+-----+
Tables_in_mydb1
+-----+
wp_commentmeta
wp_comments
wp_links
wp_options
wp_postmeta
wp_posts
wp_term_relationships
wp_term_taxonomy
wp_termmeta
wp_terms
wp_usermeta
wp_users
+-----+
12 rows in set (0.00 sec)

mysql>
```

Activat

**Thank You!**