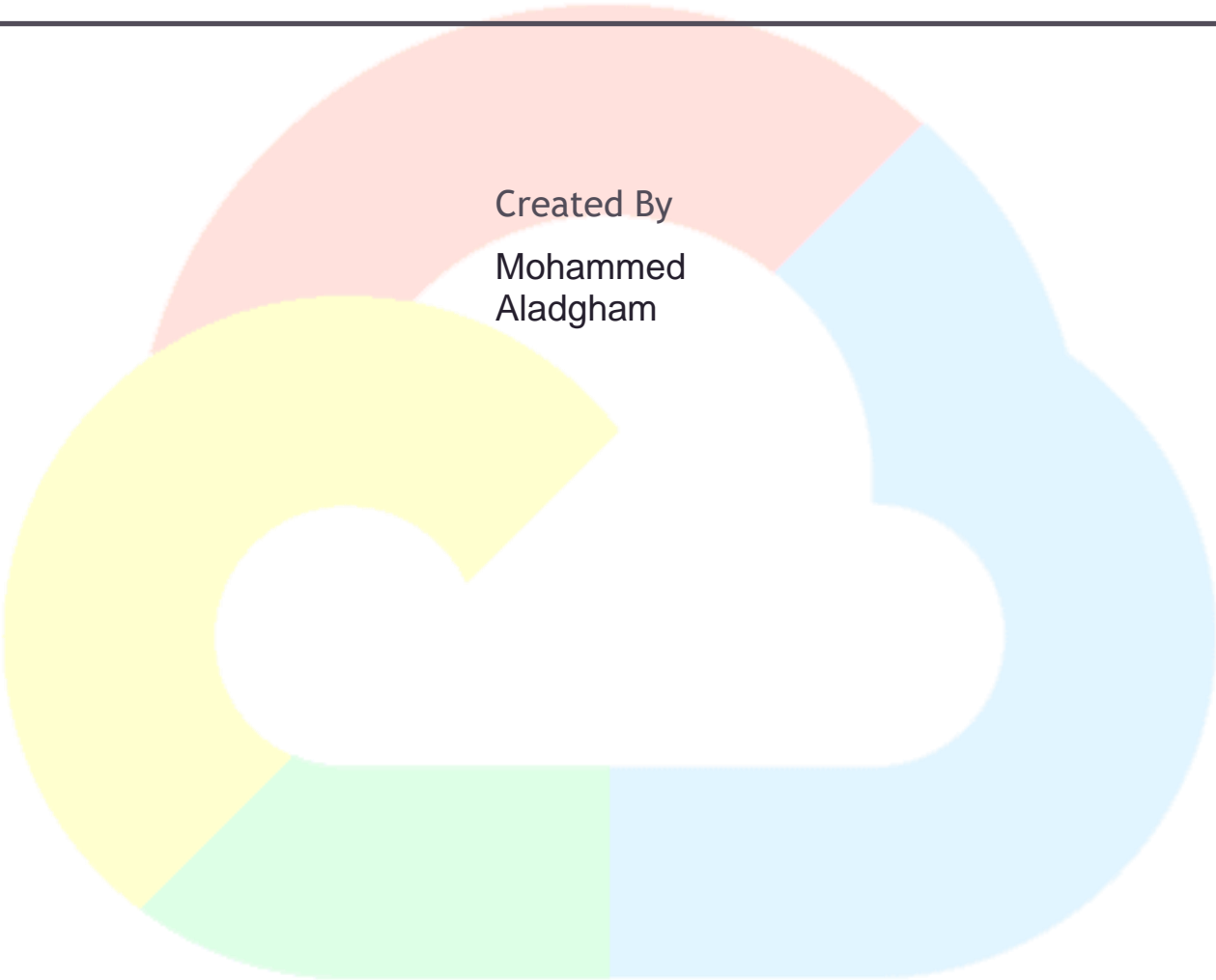# Creating a MySQL Instance with Google Cloud SQL and website on VM instance

29 Steps

Created By

Mohammed
Aladgham

Introduction

GradeHub is a website that students use to view their courses and grades. I chose google cloud platform because it's convenient, reliable and offers a lot of options to choose from VM instance, storage, databases etc.

In this project I chose E2 VM instance with Linux operating system for hosting the website it offers a good computing power and it can handle the traffic easily.
For the Database I went with Cloud SQL, why?
First off, scalability. I want my site to handle loads of students checking their grades at once. With Cloud SQL, it can scale up or down on demand. So, whether it's mid-term madness or end-of-semester chaos, GradeHub stays smooth.

And let's talk reliability. Cloud SQL comes with high availability and automatic backups, meaning the data is safe and the site stays up, no matter what.
Security? Check. Cloud SQL encrypts data both at rest and in transit. so, I can rest easy knowing those grades are for student eyes only.
Now, here's the kicker: it's a managed service. That means Google takes care of all the boring stuff like patches and updates. I just get to focus on making your site awesome without sweating the small stuff.
integration? Cloud SQL plays nicely with other Google services like Compute Engine and BigQuery. So, if I ever want to expand my site, it's a breeze.
Cost-wise, I only pay for what I use, and Google offers some nifty discounts to keep my budget reasonable.
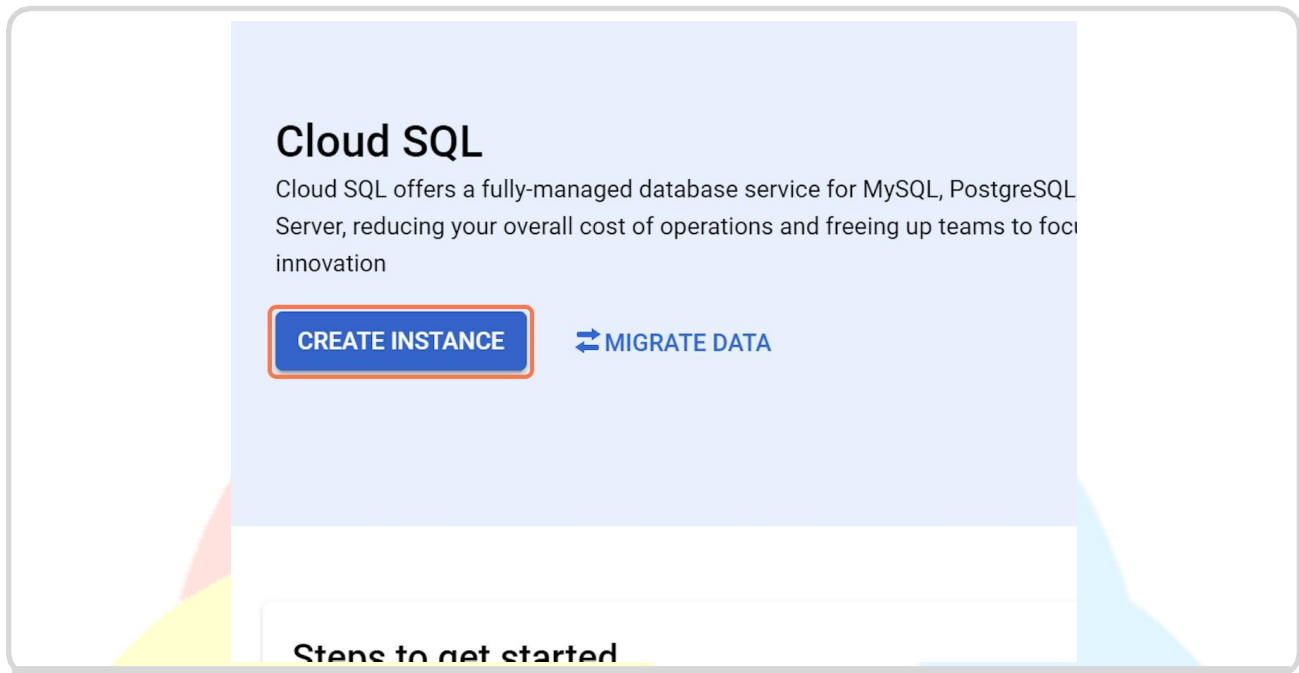Plus, MySQL? It's like the Swiss Army knife of databases. Widely used, tons of resources out there, so my team won't be stuck scratching their heads when they need help.
So, Cloud SQL gives scalability, reliability, security, easy management, seamless integration, cost-effectiveness, and a tried-and-true database solution.
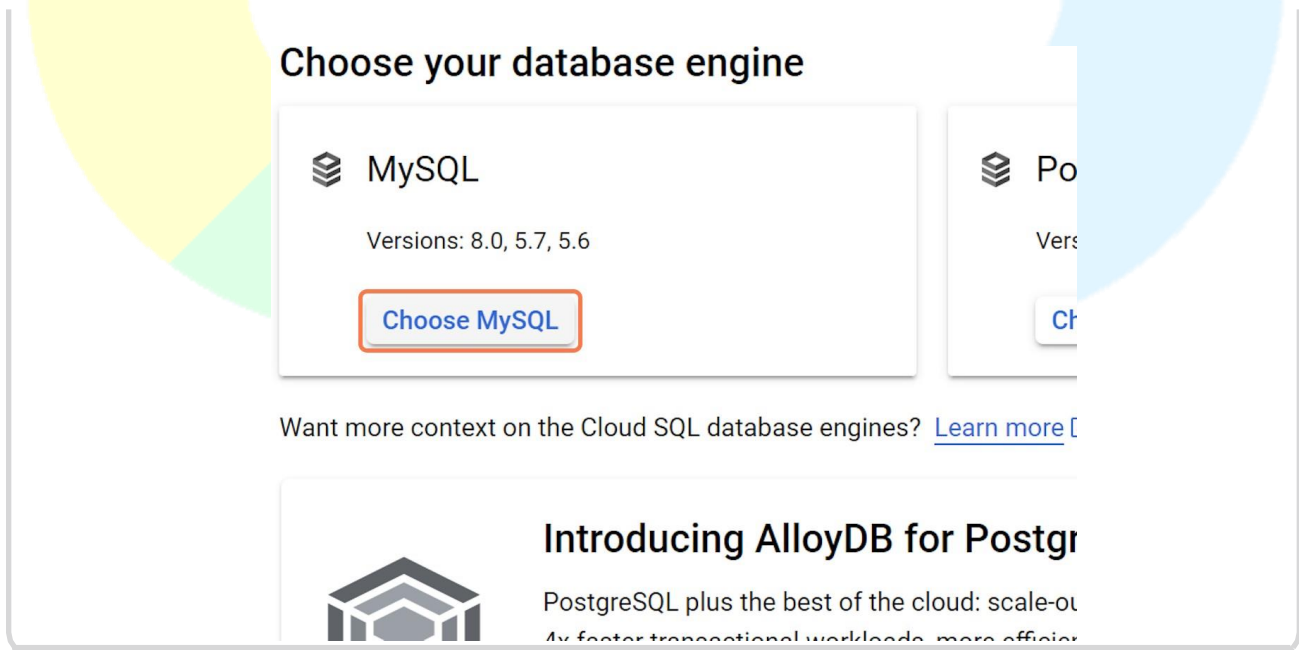It's like the cherry on top of my student grades website.

STEP 1

Click on CREATE INSTANCE

STEP 2

Click on Choose MySQL

STEP 3

Type the name of the instance.

STEP 4

Type your password.

STEP 5

Click on Show password
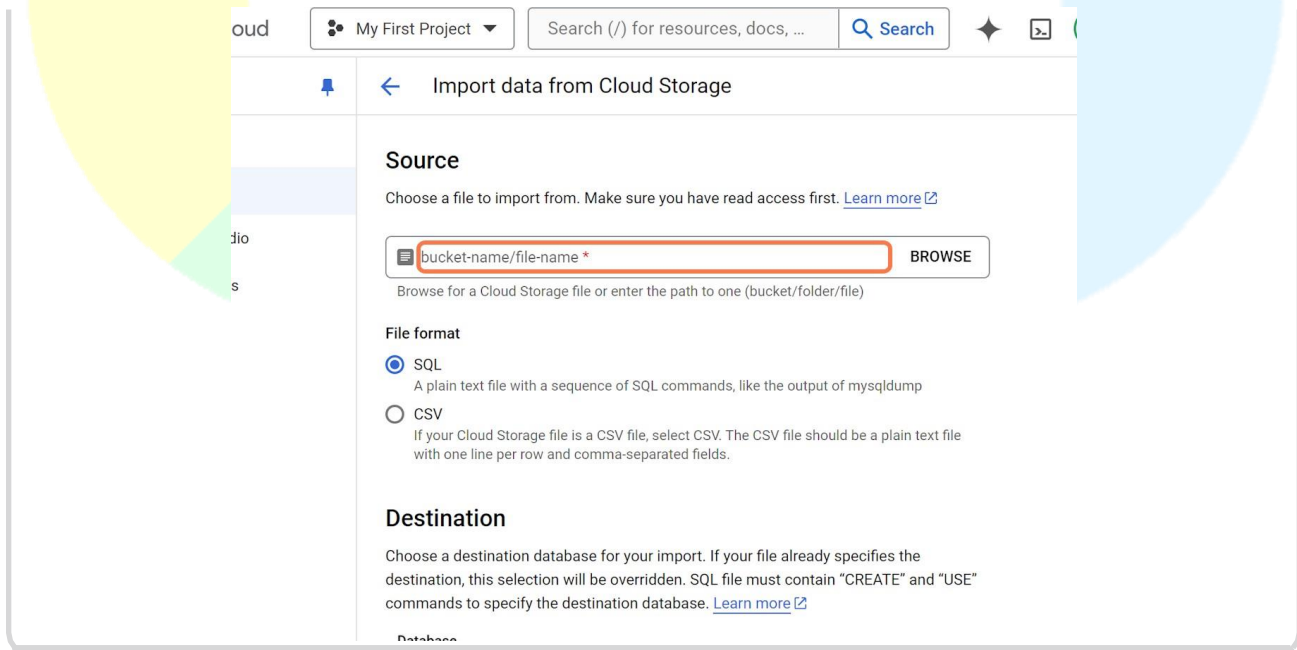

STEP 6

Click on CREATE INSTANCE

STEP 7
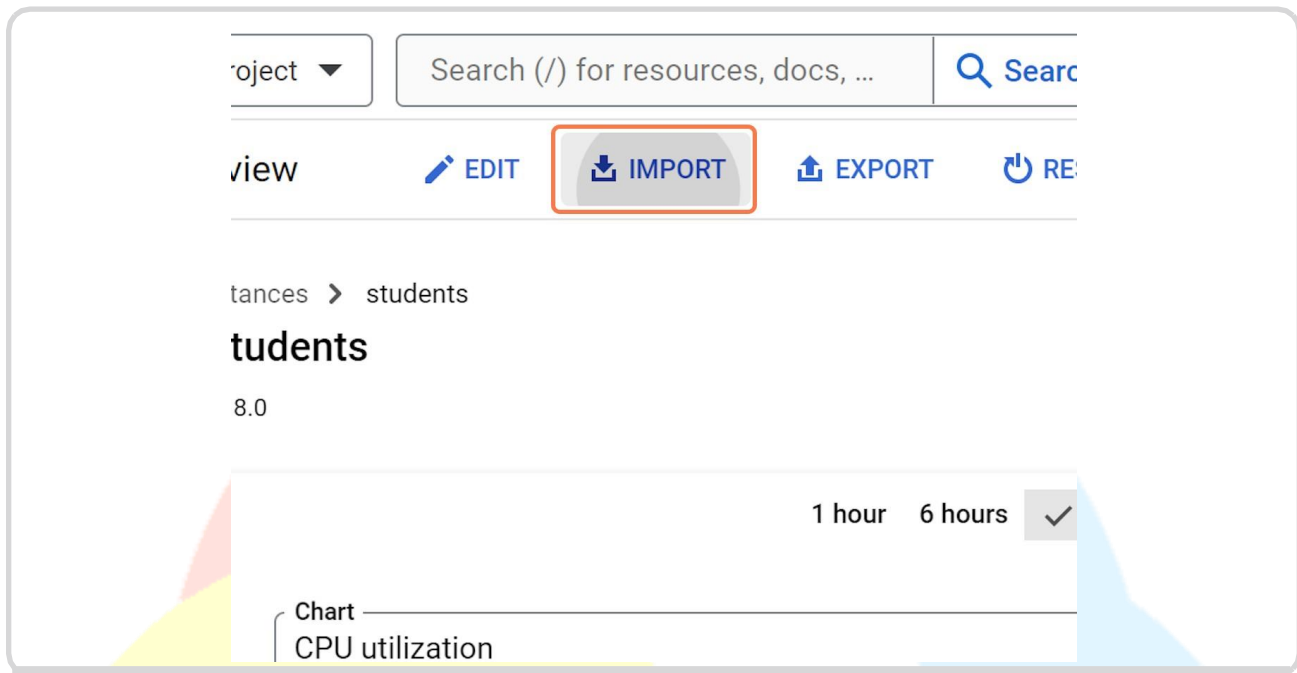
Click on IMPORT

STEP 8

Click on bucket-name/file-name

STEP B

Click on WROOSE

ead access first. Learn more ⧉

BROWSE

e (bucket/folder/file)

s, like the output of mysqldump

STEP 1g

Click on qcp-lab-2

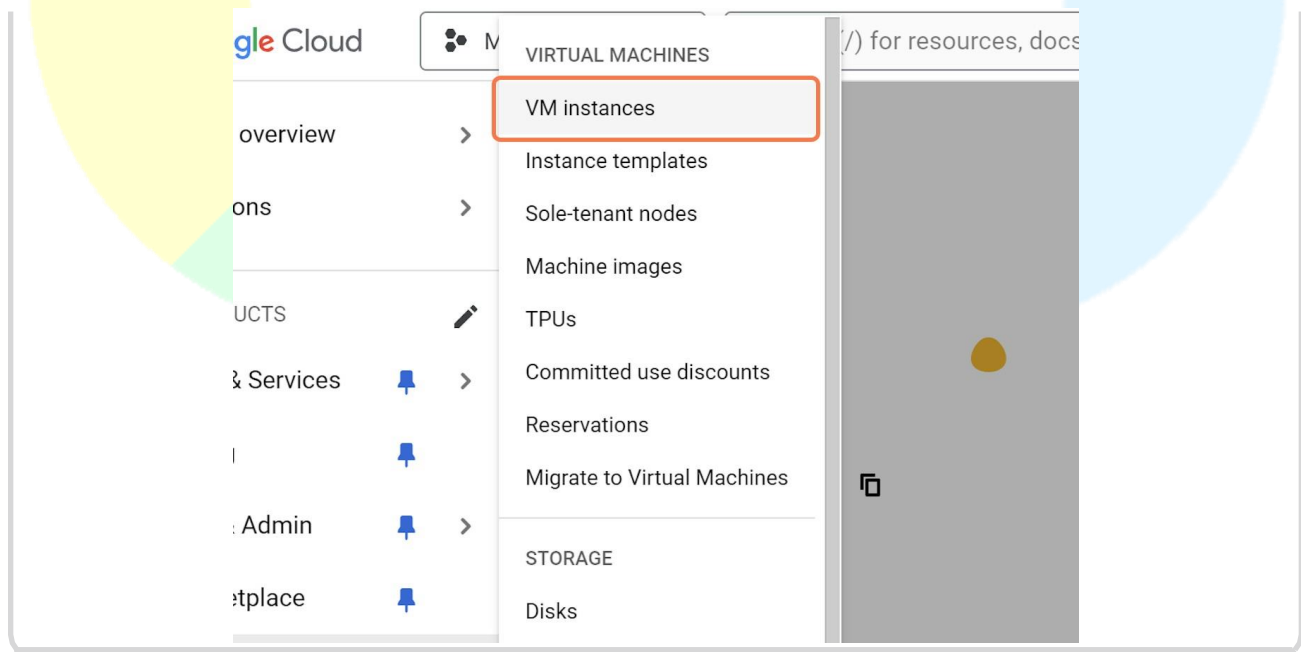e to import

spot.com >

>

414.appspot.com

View child resources

>
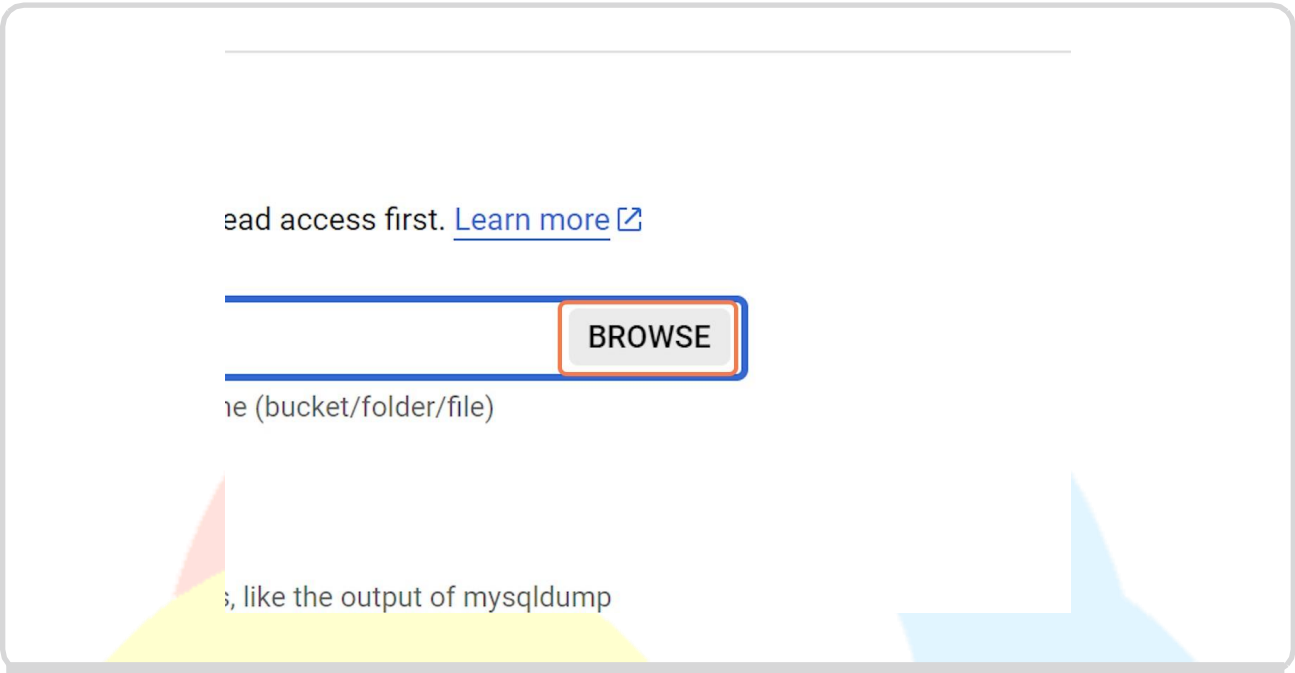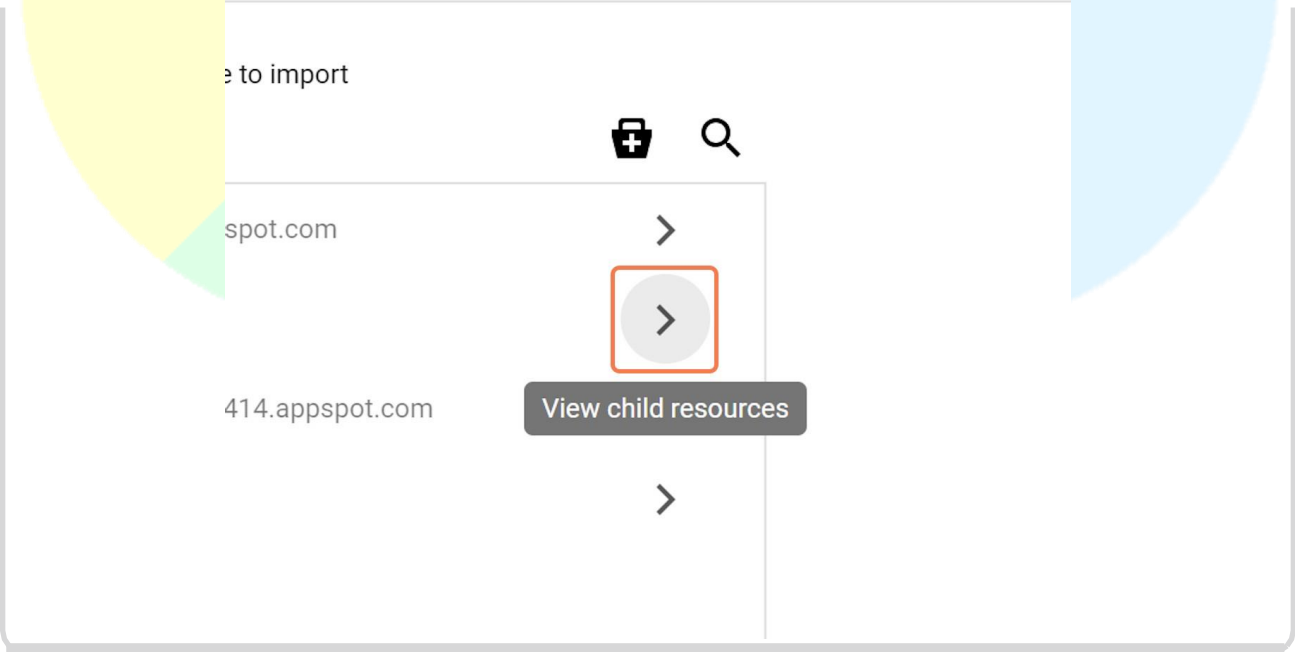
STEP 11

Choose the SQL file to import your tables
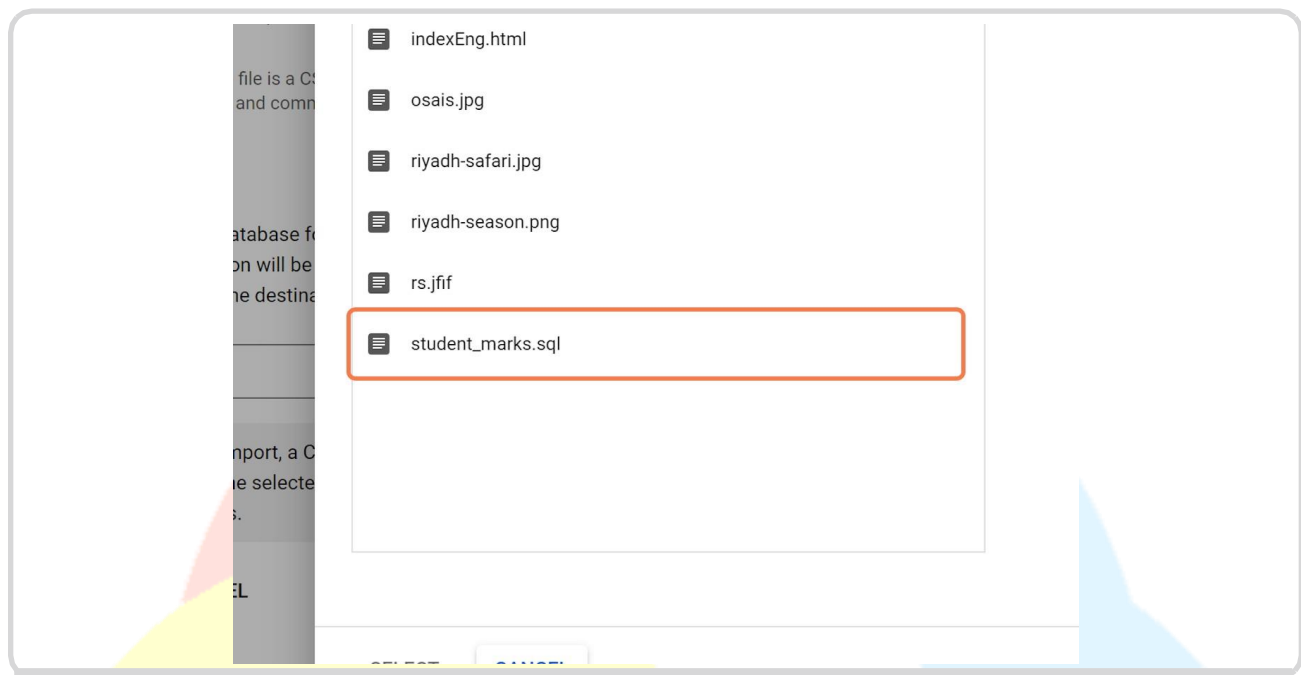
STEP 12

Click on VM instances

STEP 13

Click on CREATE INSTANCE

STEP 14

Type the name of VM instance "webserver"

STEP 15

Check Allow http traffic.

te

nce from machine

VM instance from an
e image

o-go solution onto a

○ Allow default access

○ Allow full access to all Cloud

○ Set access for each API

Firewall ❓

Add tags and firewall rules to allow

☑ Allow HTTP traffic

☐ Allow HTTPS traffic

☐ Allow Load Balancer Health

Observability - Ops A

STEP 16

Check Allow https traffic.

VM instance from an
e image

o-go solution onto a

○ Set access for each API

Firewall ❓

Add tags and firewall rules to allow

☑ Allow HTTP traffic

☑ Allow HTTPS traffic

☐ Allow Load Balancer Health

Observability - Ops A

Monitor your system through collec

☐ Install Ops Agent for Monitor

STEP 17

Click on CREATE

☑ Allow HTTPS traffic

☐ Allow Load Balancer Health Checks

Observability - Ops Agent

Monitor your system through collection of l

☐ Install Ops Agent for Monitoring and

Advanced options

Networking, disks, security, management, so

CREATE   CANCEL   <> EQUIV

STEP 18
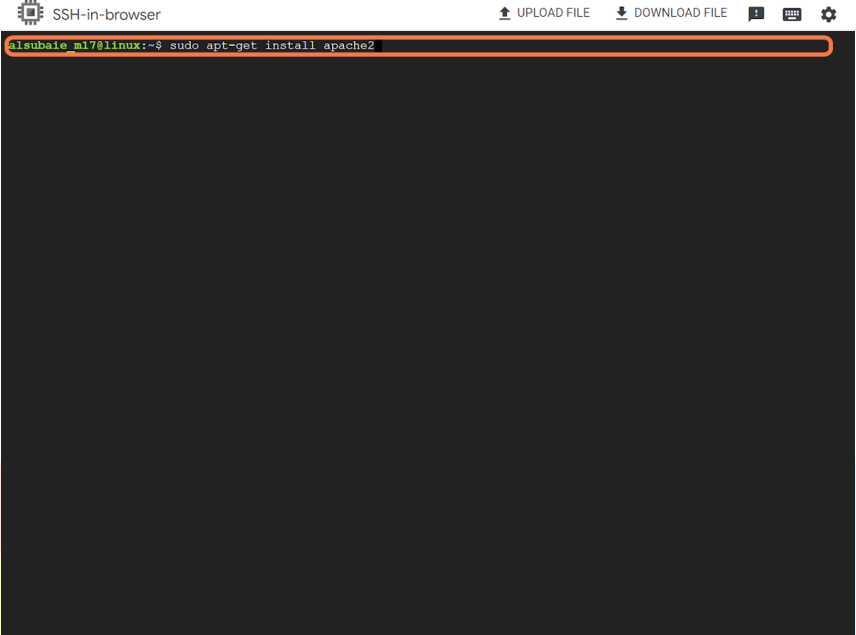
Click on SSH

Internal IP	External IP	Connect	
10.128.0.5 (nic0)	34.68.152.31 ⧉ (nic0)	SSH ▾	⋮
10.128.0.4 (nic0)	34.28.162.36 ⧉ (nic0)	SSH ▾	⋮
10.128.0.3 (nic0)	34.30.39.121 ⧉ (nic0)	RDP ▾	⋮

STEP 1B

Click on alsubaie@m17xlinu:~$Usudoapt-qetinstallapache2
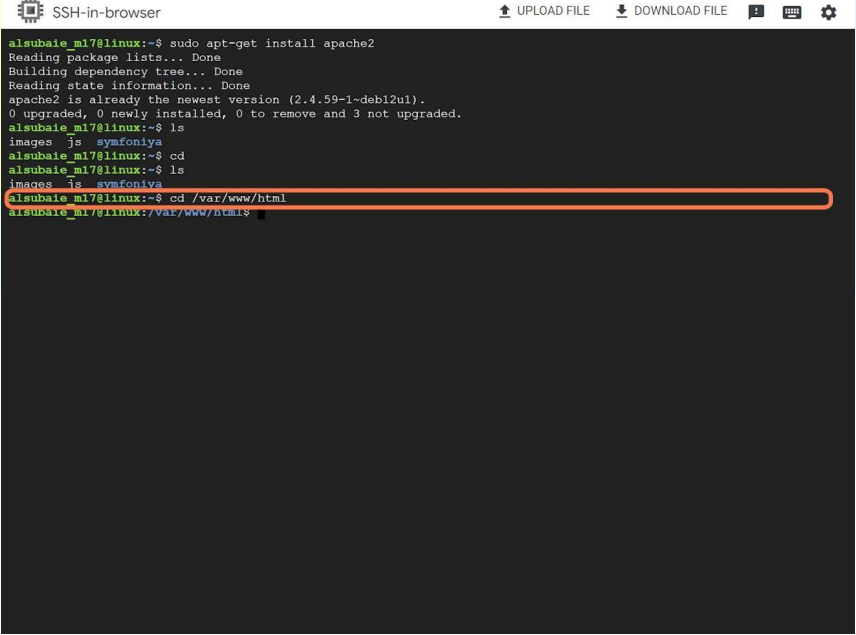
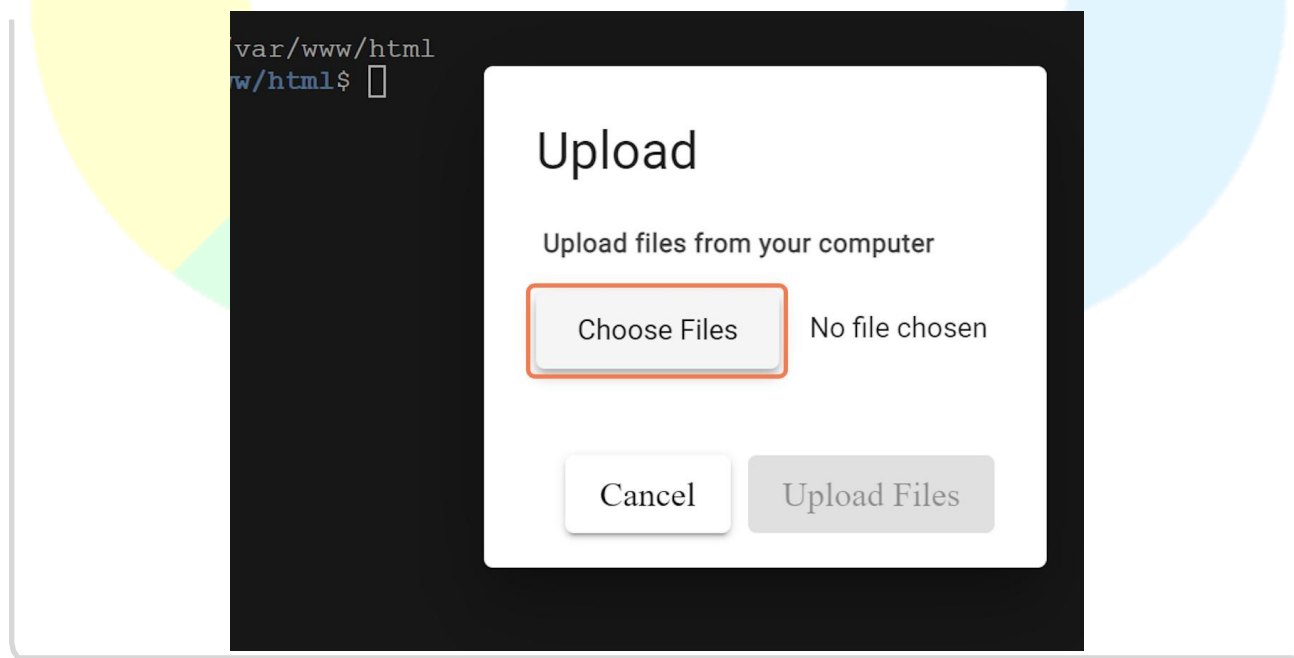## STEP 2g

Type linux:~$ cd/var/www/html
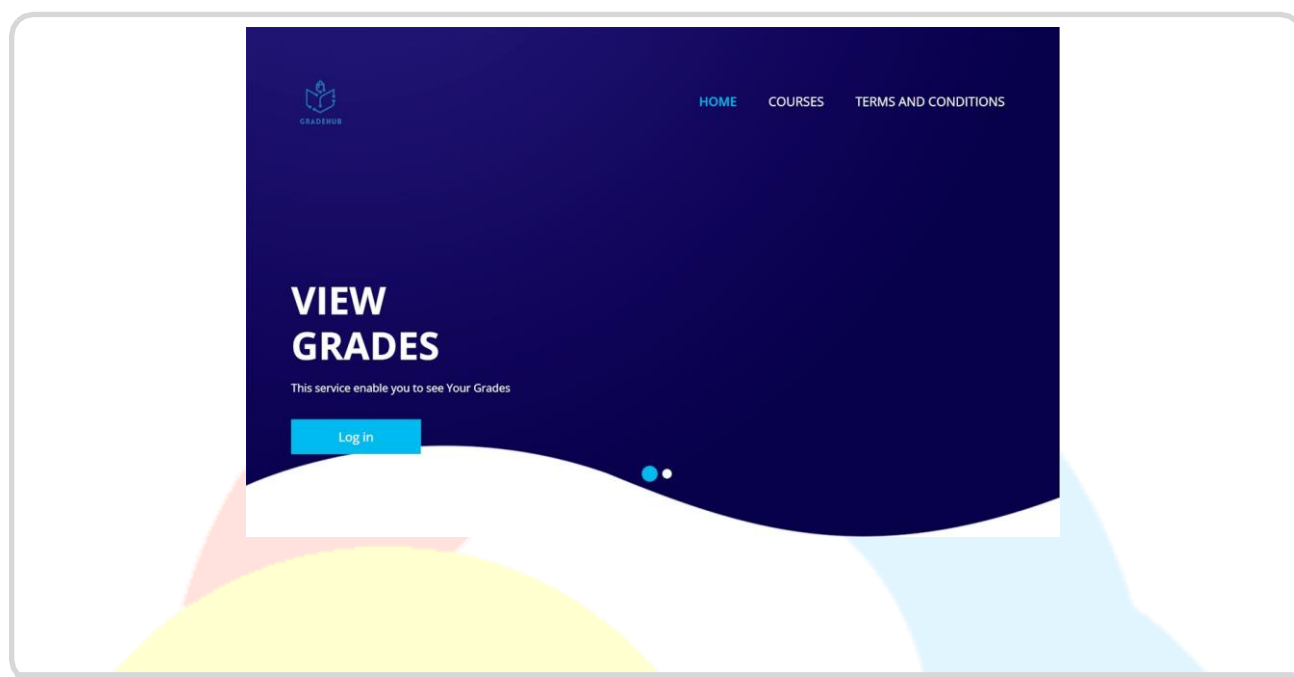
STEP 21

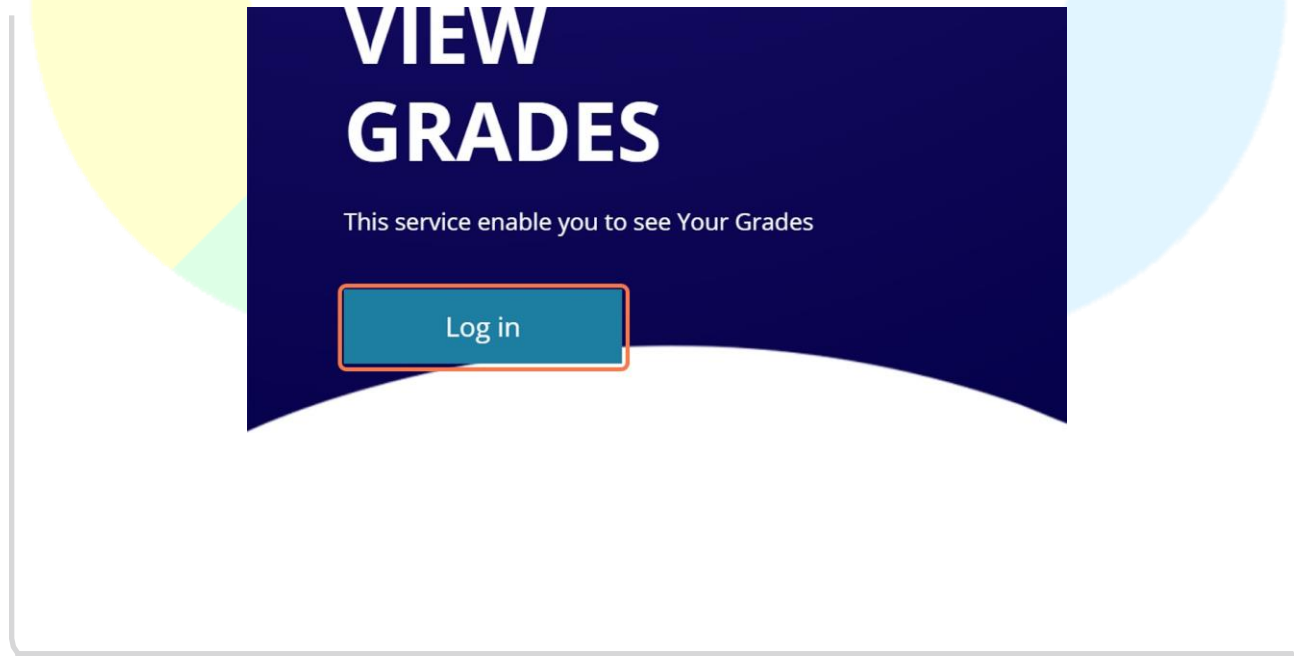## Click on upload file
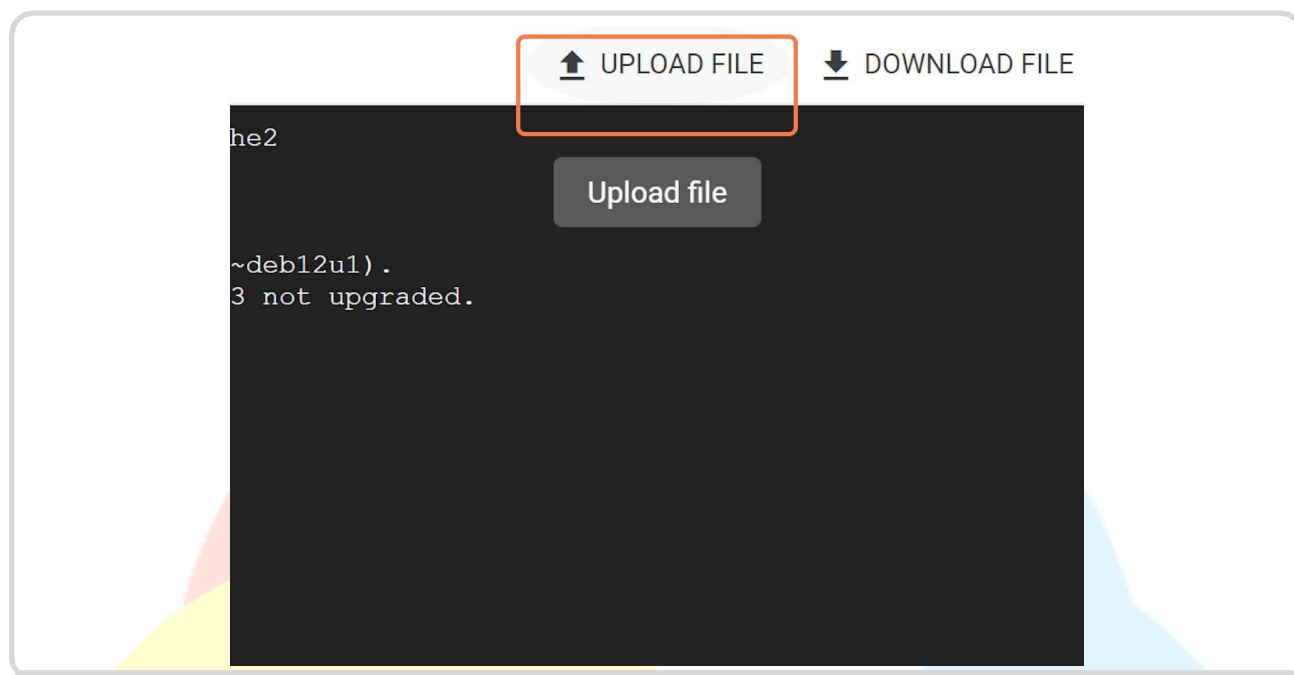
STEP 22

Choose files

STEP 23

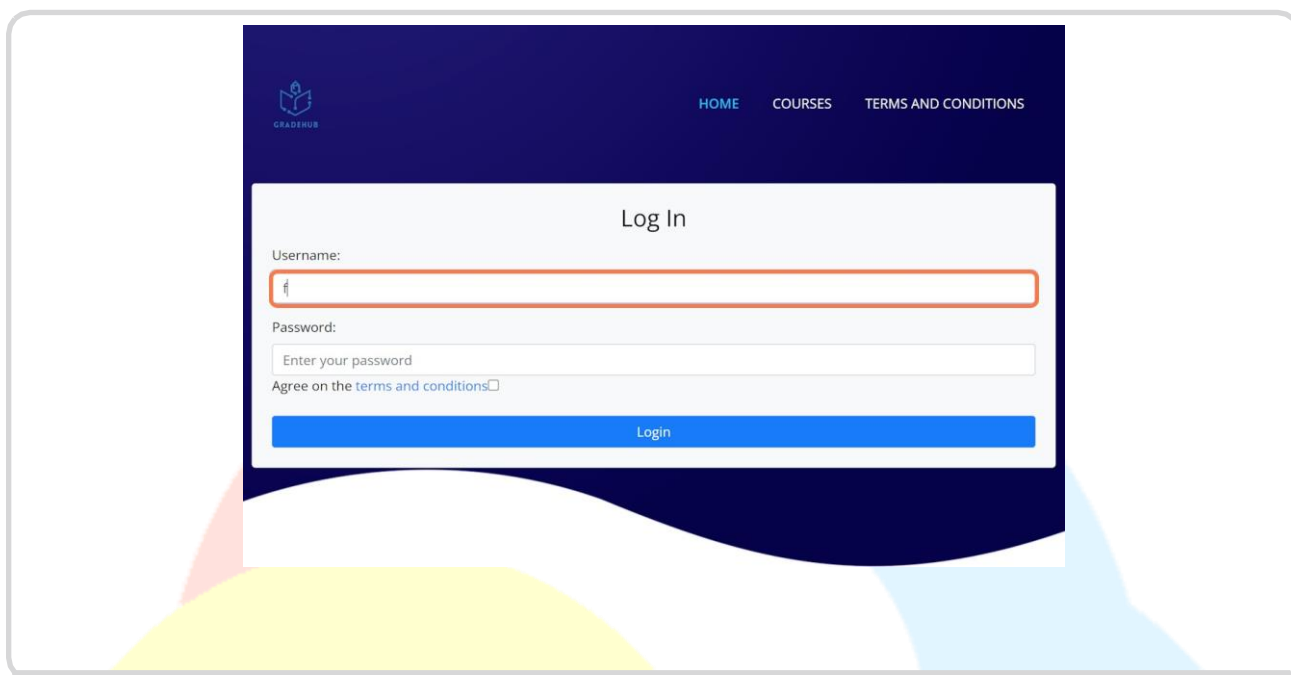**Now we can access the the website Hia the VM instance external IP**
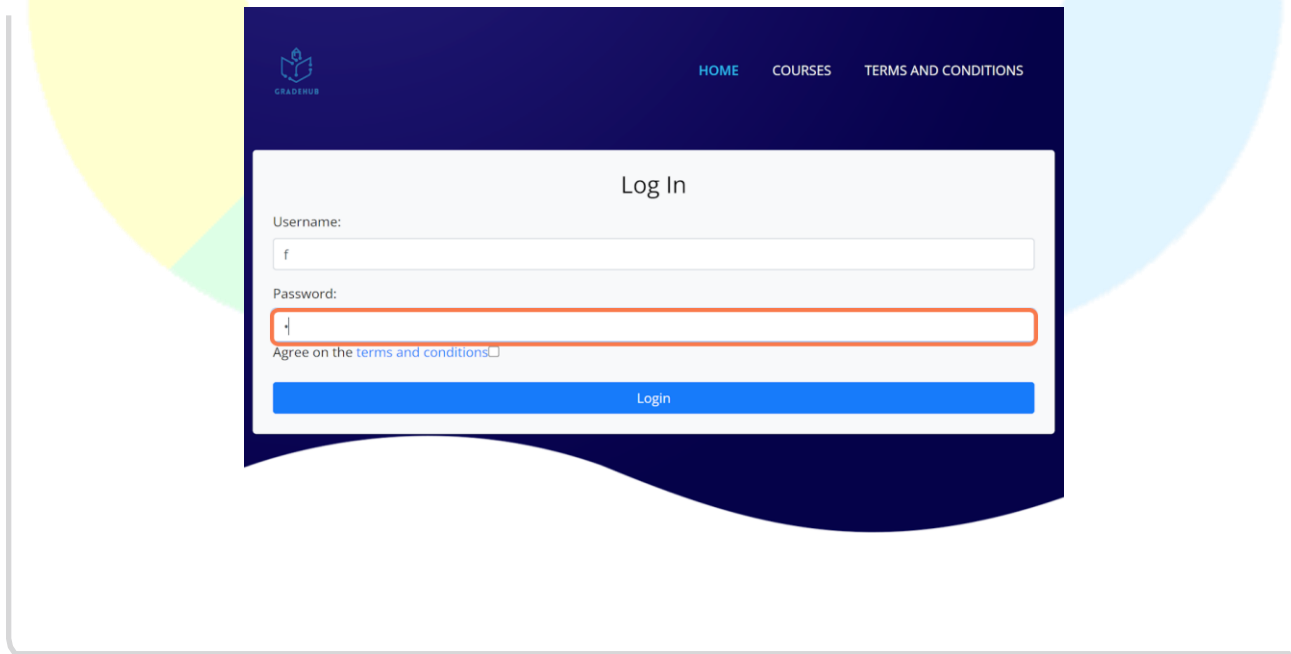

STEP 24

Click on Log in

STEP 25

Here I tried the login credentials that stored in the cloud instance
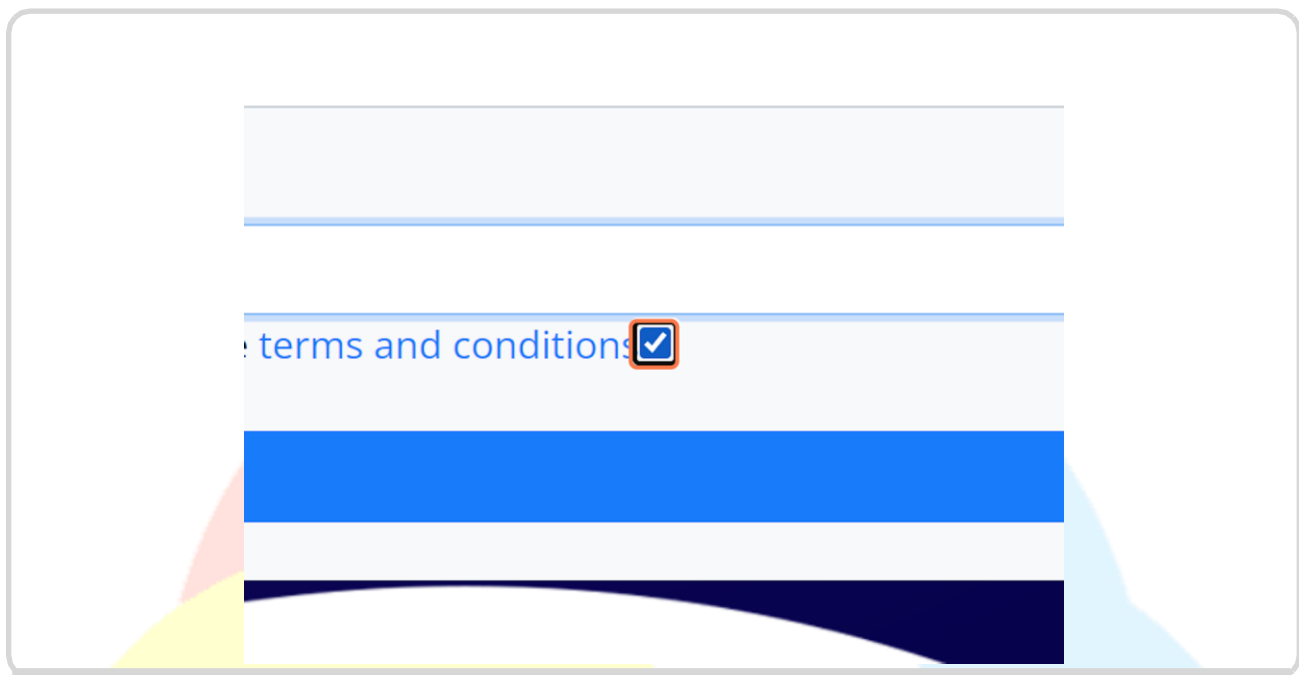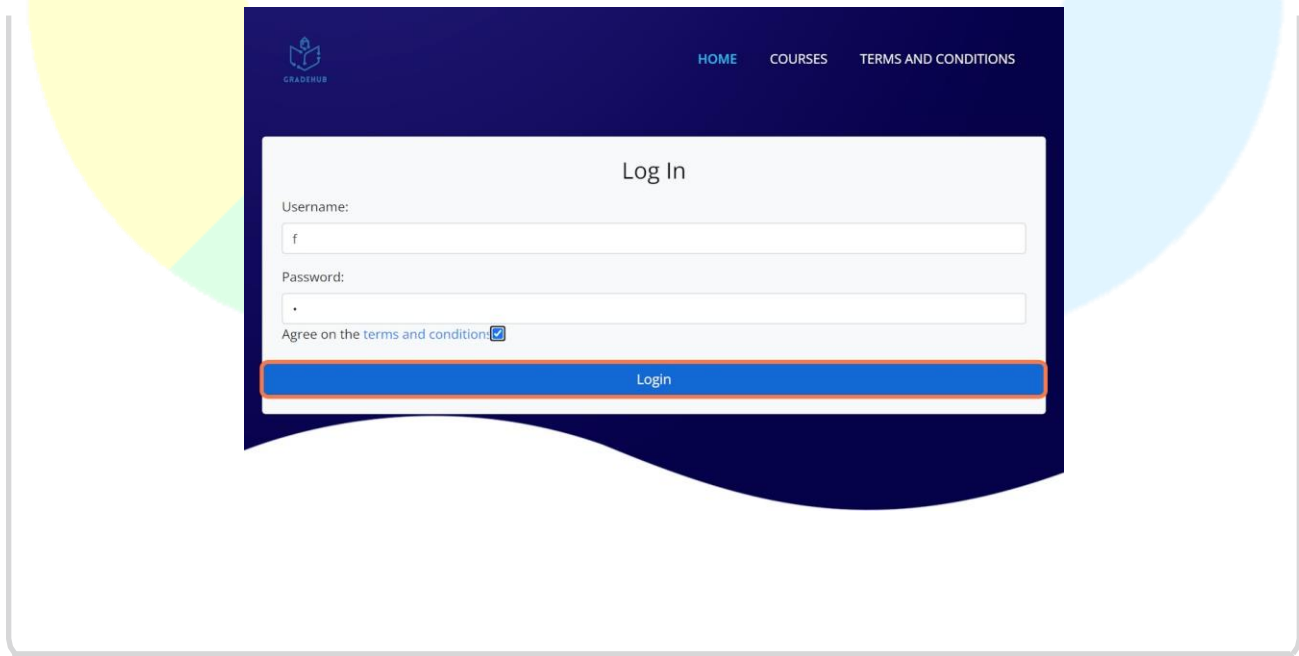

STEP 26

Type password.

STEP 27

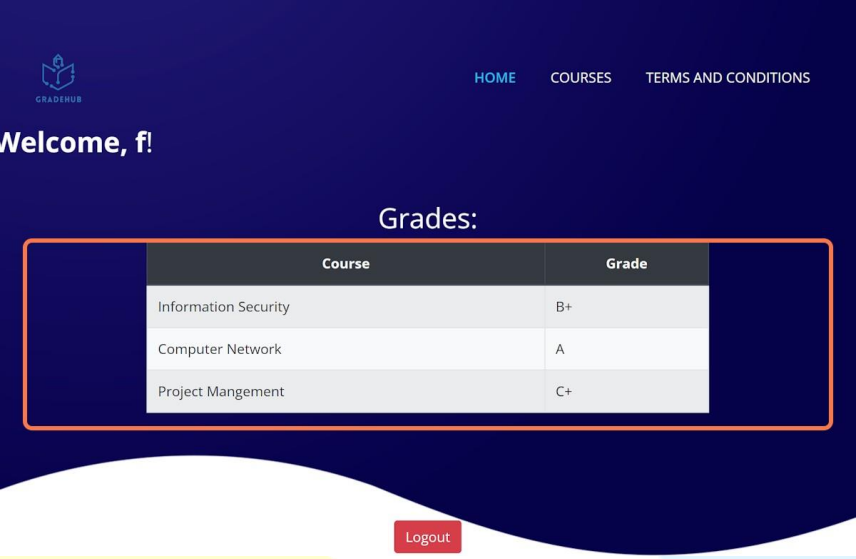## Check Agree on the terms and conditions.

STEP 28

Click on Login

STEP 2B

And here is the information based on the data that is stored in the cloud SQL

Thank You