






Google Cloud Platform Project

Snake Game on Google Cloud

Creator Information	
	Sultan Alanazi
	https://www.linkedin.com/in/sultan-la-alanazi/
	https://github.com/SultanAlanazie

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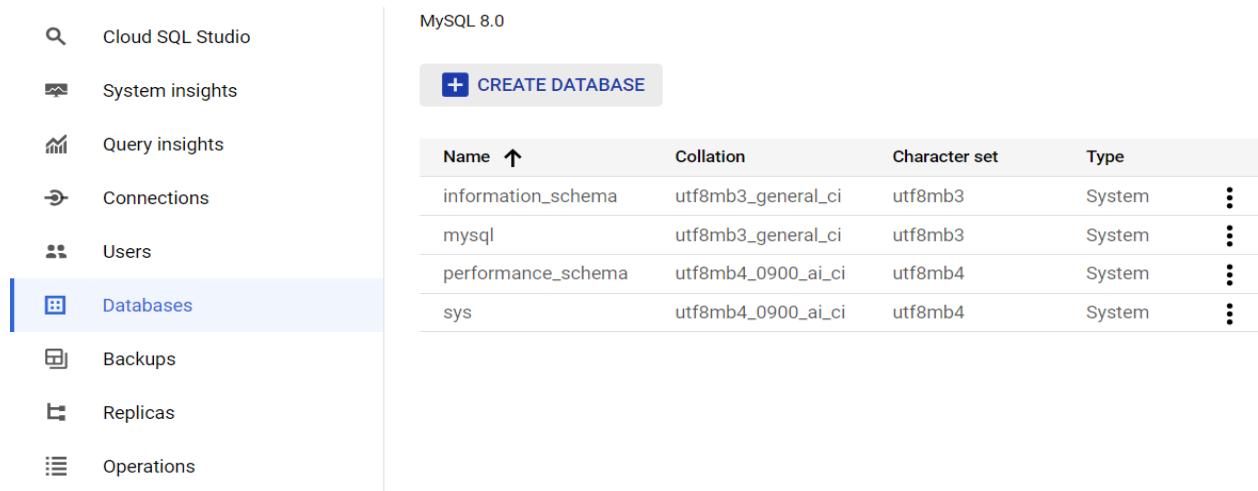


General Instructions

- 1- Make your own GCP account.
Through URL: <https://cloud.google.com/>
- 2- After you make your account go to SQL and create the database.

Create Database

1. Databases -> CREATE DATABASE



Name ↑	Collation	Character set	Type	
information_schema	utf8mb3_general_ci	utf8mb3	System	⋮
mysql	utf8mb3_general_ci	utf8mb3	System	⋮
performance_schema	utf8mb4_0900_ai_ci	utf8mb4	System	⋮
sys	utf8mb4_0900_ai_ci	utf8mb4	System	⋮

2. Enter **Database Name** and hit **“CREATE”**

Create a database

Database Name *
snake_db

Must follow the MySQL identifier rules. [Learn more](#)

Character set *
utf8

Can be changed later by executing an ALTER DATABASE query.

Collation
Default collation

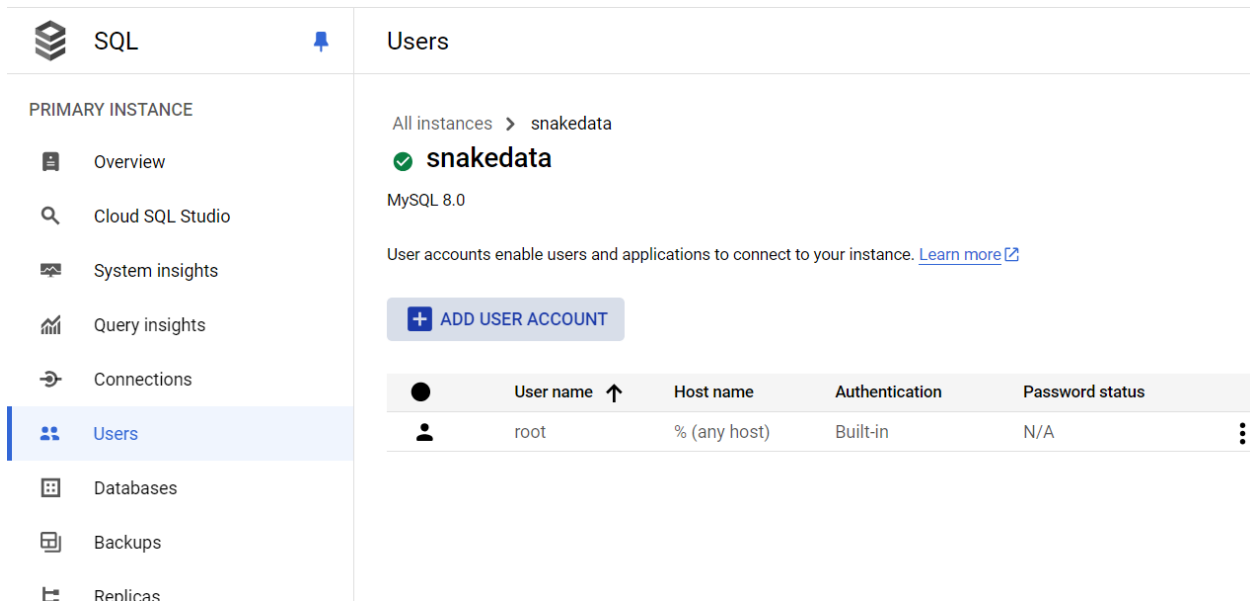
Can be changed later by executing an ALTER DATABASE query.

CREATE **CANCEL**



Add User:

1. Users -> ADD USER ACCOUNT




The screenshot shows the Google Cloud SQL console interface. On the left, a sidebar lists navigation options: Overview, Cloud SQL Studio, System insights, Query insights, Connections, Users (selected), Databases, Backups, and Replicas. The main panel is titled 'Users' and shows the instance 'snakedata' (MySQL 8.0). A button '+ ADD USER ACCOUNT' is visible. Below it, a table lists the existing 'root' user with host name '% (any host)' and built-in authentication.

User name	Host name	Authentication	Password status
root	% (any host)	Built-in	N/A

2. enter **user name** and **password** then hit "ADD"

☒ **Built-in authentication**
Creates a new username and password specific to this instance. User account will have `cloudsqlsuperuser` root access, but you can customize that later as needed. [Learn more](#)

User name *
sultan

Password (Optional)
.....  [GENERATE](#)

✓ **PASSWORD POLICY**

Host name ?
☒ Allow any host (%)
☐ Restrict host by IP address or address range

Users created with built-in authentication have the same privileges as the **root** user. [Learn more](#)

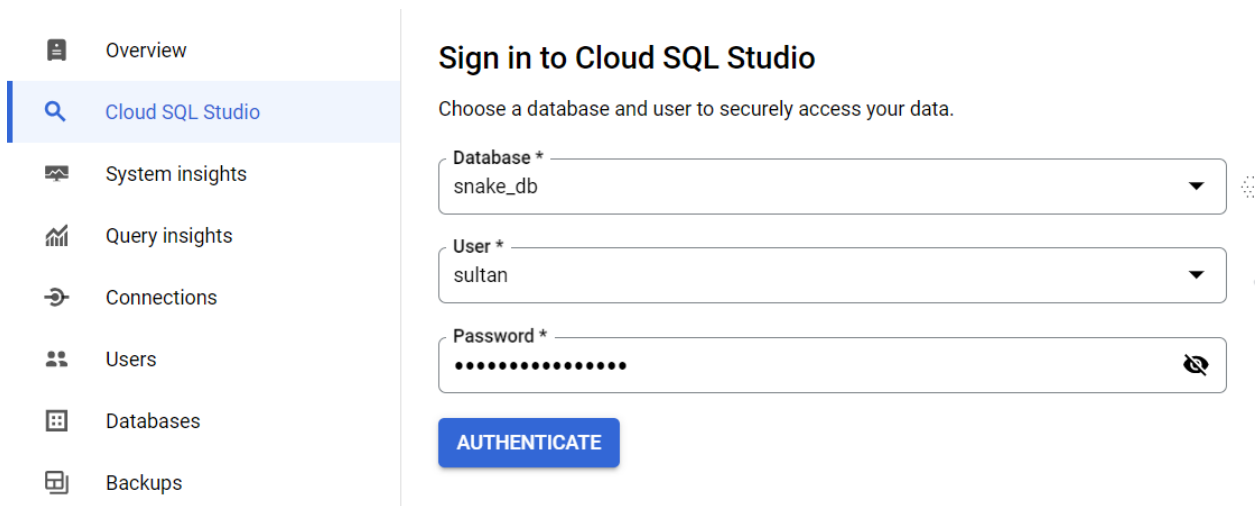
☐ **Cloud IAM**
Associates an existing IAM principal with this user account. Must have a role providing instance-level access assigned to connect.

[ADD](#) [CANCEL](#)

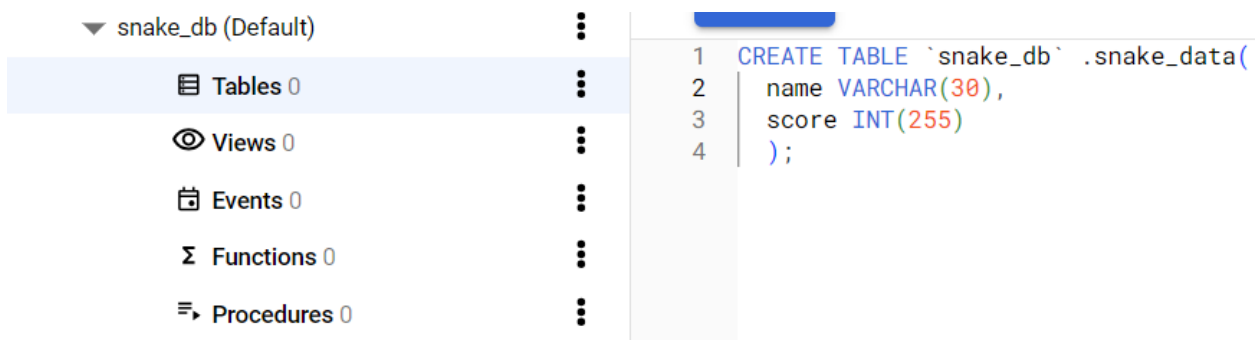


Create Table:

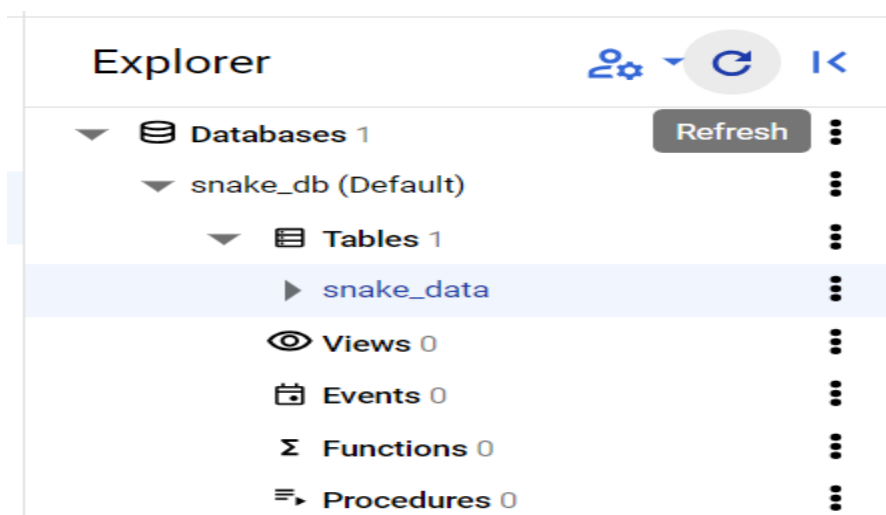
1. SQL-> Cloud SQL Studio-> Choose **Database**, **User**, **User's Password**:



2. Create Table:



3. Result



Editor:

1. Write in the shell: “`git clone https://gist.github.com/948f425c554c9f9be1a4f34ff0e4c10b.git`”

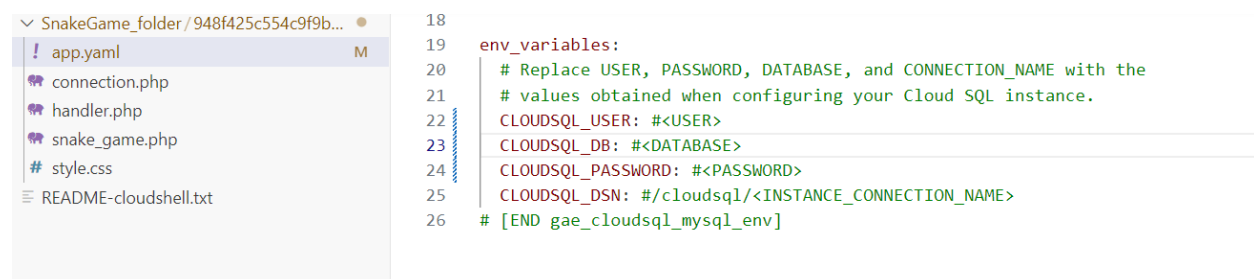
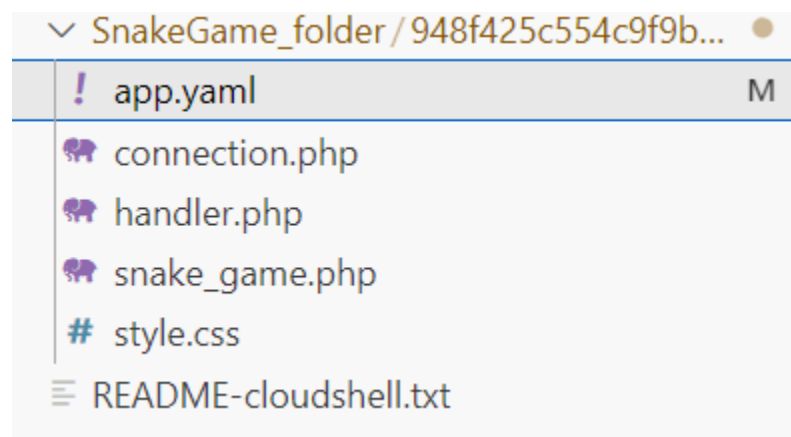
```
sultanfoorwork@cloudshell:~ (flamy-project-63104)$ git clone https://gist.github.com/948f425c554c9f9be1a4f34ff0e4c10b.git
Cloning into '948f425c554c9f9be1a4f34ff0e4c10b'...
remote: Enumerating objects: 17, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (7/7), done.
remote: Total 17 (delta 1), reused 0 (delta 0), pack-reused 10
Receiving objects: 100% (17/17), 9.68 KiB | 2.42 MiB/s, done.
Resolving deltas: 100% (3/3), done.
```

2. Open the Editor



```
object-63104)$ git clone https://gist.github.com/948f425c554c9f9be1a4f34ff0e4c10b.git
Cloning into '948f425c554c9f9be1a4f34ff0e4c10b'...
remote: Enumerating objects: 17, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (7/7), done.
remote: Total 17 (delta 1), reused 0 (delta 0), pack-reused 10
Receiving objects: 100% (17/17), 9.95 MiB/s, done.
Resolving deltas: 100% (3/3), done.
object-63104)$ ls
README-cloudshell.txt
```

3. Open “`app.yaml`” scroll down to `env_variables:`



```
18
19 env_variables:
20   # Replace USER, PASSWORD, DATABASE, and CONNECTION_NAME with the
21   # values obtained when configuring your Cloud SQL instance.
22   CLOUDSQL_USER: #<USER>
23   CLOUDSQL_DB: #<DATABASE>
24   CLOUDSQL_PASSWORD: #<PASSWORD>
25   CLOUDSQL_DSN: #/cloudsql/<INSTANCE_CONNECTION_NAME>
26   # [END gae_cloudsql_mysql_env]
```



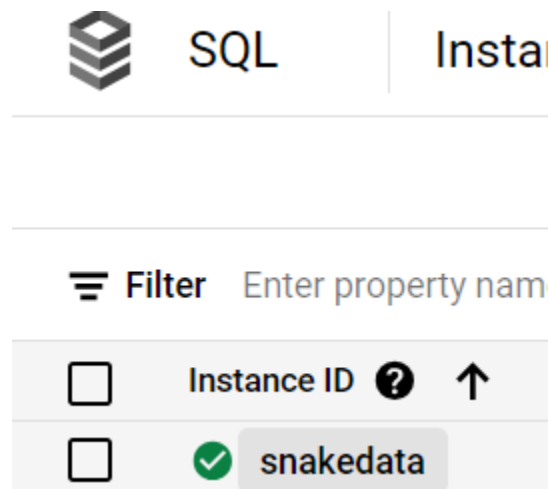
4. Replace the **USER**, **PASSWORD**, **DATABASE**, and **CONNECTION_NAME**:

And this is how you get them

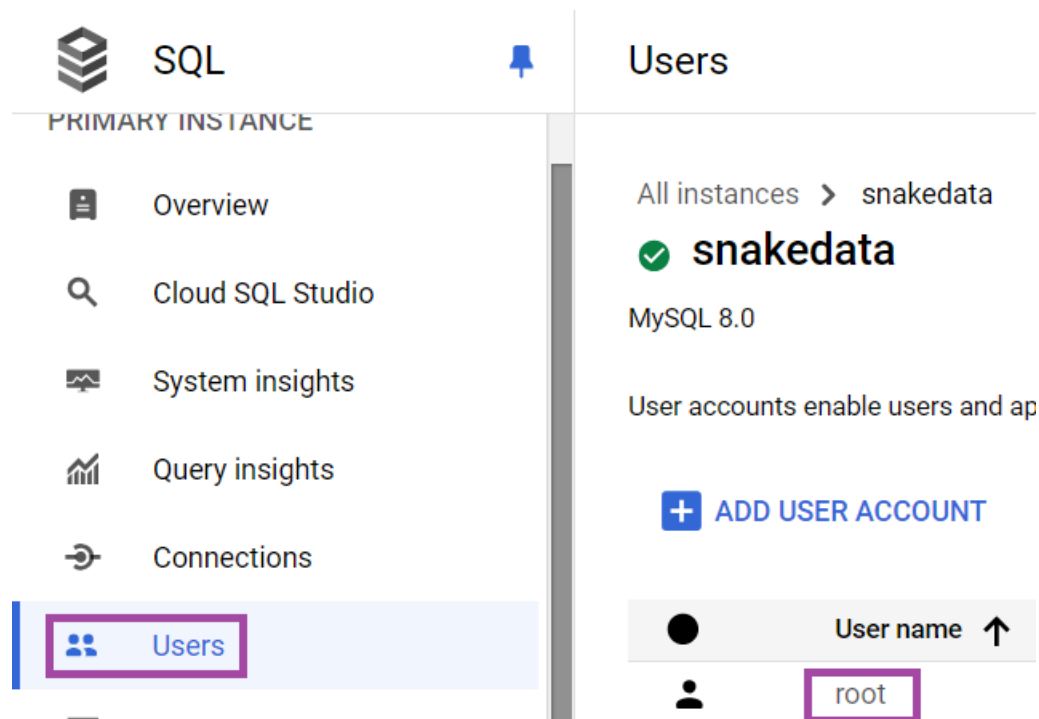
CLOUDSQL_USER:

Go to SQL-> Choose instance -> Users

1.



2.



CLOUDSQL_DB:

SQL -> Databases

1.

The screenshot displays the Google Cloud SQL console interface. On the left, a sidebar menu under the 'SQL' heading includes options like Overview, Cloud SQL Studio, System insights, Query insights, Connections, Users, **Databases** (highlighted with a purple box), Backups, and Replicas. The main panel is titled 'Databases' and shows the instance 'snakedata' (MySQL 8.0) with a green status icon. Below the instance name is a '+ CREATE DATABASES' button. A table lists the databases: information_schema, mysql, performance_schema, **snake_db** (highlighted with a purple box), and sys. The breadcrumb 'All instances > snakedata' is visible at the top of the main panel.



CLOUDSQL_PASSWORD:

SQL->Users

Change the root password and save it

1.

The screenshot shows the Google Cloud SQL console interface. On the left is a navigation menu with options: Overview, Cloud SQL Studio, System insights, Query insights, Connections, Users (selected), Databases, Backups, Replicas, and Operations. The main content area is titled 'Users' and shows details for the 'snakedata' instance (MySQL 8.0). It includes a table of user accounts:

User name	Host name	Authentication	Password status
root	%(any host)	Built-in	N/A
sultan	%(any host)	Built-in	N/A

A dropdown menu is open for the 'root' user, showing options: 'Change password', 'Edit password policy', and 'Remove'.

2.

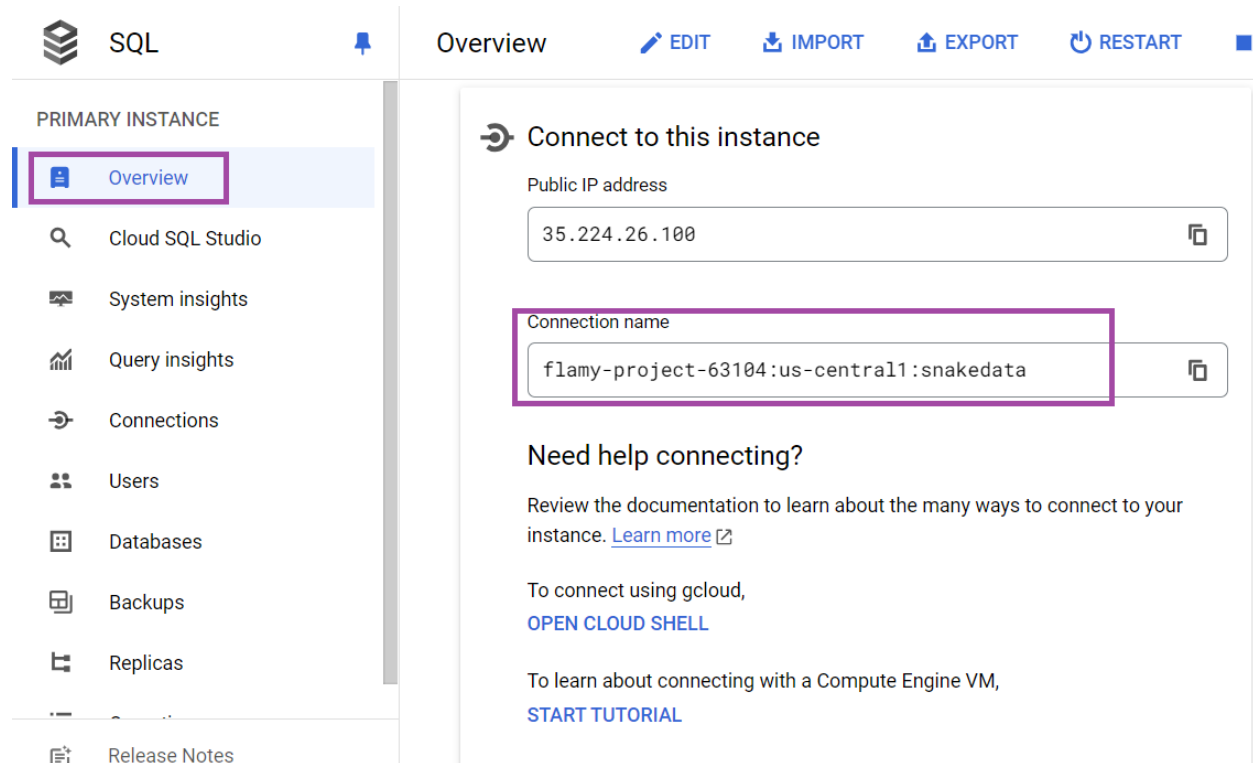
The dialog box is titled 'Change password for user root'. It contains an information icon and a message: 'Remember to update your application to use your new password. Note, existing connections to your instance will not be terminated.' Below this is a 'New password' input field with a 'GENERATE' button. There is also an unchecked checkbox labeled 'Retain current password' with a note: 'If enabled, the current password for this user account will be retained as the user's secondary password until you discard it or change the password again. [Learn more](#)'. At the bottom right are 'CLOSE' and 'OK' buttons.



CLOUDSQL_DSN:

SQL->Overview-> Scroll down to "Connect to this instance" box

1.



SQL Overview EDIT IMPORT EXPORT RESTART

PRIMARY INSTANCE

- Overview
- Cloud SQL Studio
- System insights
- Query insights
- Connections
- Users
- Databases
- Backups
- Replicas
- Release Notes

Connect to this instance

Public IP address

35.224.26.100

Connection name

flamy-project-63104:us-central1:snakedata

Need help connecting?

Review the documentation to learn about the many ways to connect to your instance. [Learn more](#)

To connect using gcloud, [OPEN CLOUD SHELL](#)

To learn about connecting with a Compute Engine VM, [START TUTORIAL](#)

Deploy The Game:

Run in the shell "gcloud app deploy":

1.

```
sultanfoorwork@cloudshell:~/948f425c554c9f9bela4f34ff0e4c10b (flamy-project-63104)$ gcloud app deploy
Services to deploy:

descriptor:      [/home/sultanfoorwork/948f425c554c9f9bela4f34ff0e4c10b/app.yaml]
source:          [/home/sultanfoorwork/948f425c554c9f9bela4f34ff0e4c10b]
target project:  [flamy-project-63104]
target service:  [default]
target version:  [20240609t145452]
target url:      [https://flamy-project-63104.uc.r.appspot.com]
target service account: [flamy-project-63104@appspot.gserviceaccount.com]

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



2. Enter “y”

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

Beginning deployment of service [default]...
Uploading 0 files to Google Cloud Storage
100%
File upload done.
Updating service [default]...done.
Setting traffic split for service [default]...done.
Deployed service [default] to [https://flamy-project-63104.uc.r.appspot.com]

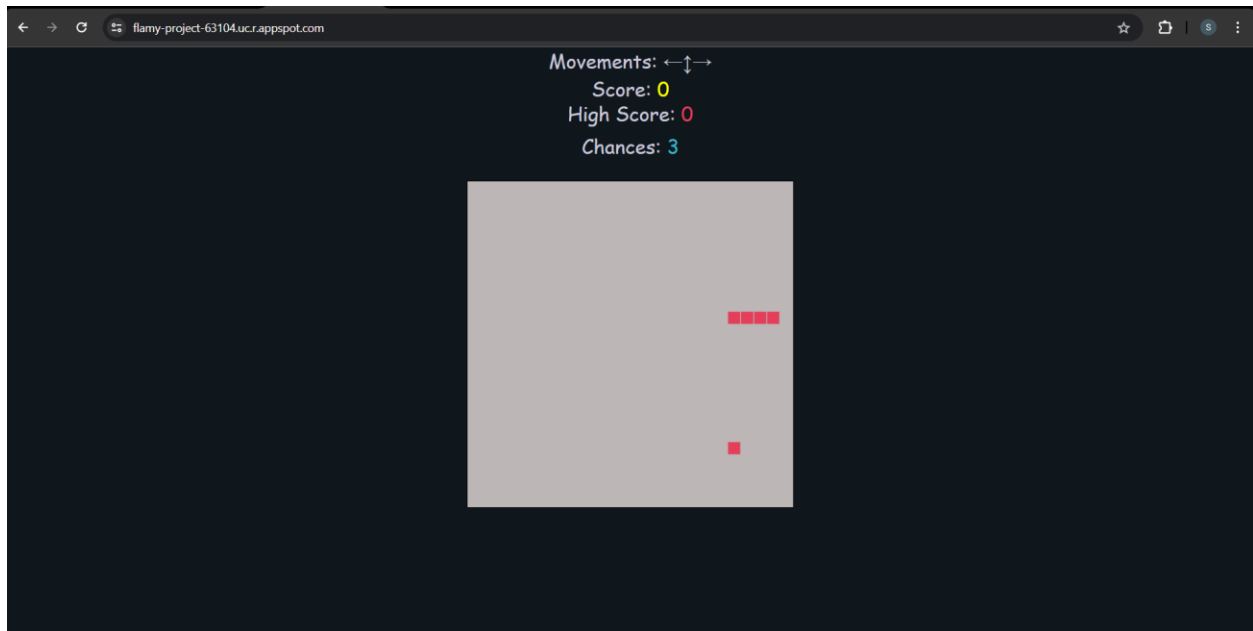
You can stream logs from the command line by running:
$ gcloud app logs tail -s default

To view your application in the web browser run:
$ gcloud app browse
sultanfoorwork@cloudshell:~/948f425c554c9f9bela4f34ff0e4c10b (flamy-project-63104)$
```

Write “gcloud app browse” to get the URL

Results:

1. the game



2. After playing by some people

You Lost
Your Hightest Score: 0

Your name

TOP 5 LEADEBOARD

Name	Score
Sultan Alanazi	23
tariq	21
Sultan	20
Ali	16
Mohammed	15

Good Luck!

