Practice Lab 2: GCP Cloud SQL – gcloud Commands

Objective: Test your understanding of basic Google Cloud SQL commands using `gcloud`. Complete each task by writing the correct `gcloud` CLI command.

Instructions

1. For each of the tasks below, write the appropriate `gcloud` command
2. If the command produces output in the terminal, include it in the `terminal_output` field.
3. If the command has **no terminal output**, set `"terminal_output"` to `null`.
4. Save all your answers as an **array of JSON objects**, each having:
    *   `"task"`: a brief description of the task as given below
    *   `"command"`: your gcloud command
    *   `"terminal_output"`: actual output or `null`
5. Place the JSON file inside a `.zip` file and upload it as your final submission.
6. Name the submission zip as `<student_ID>_sql_commands.zip`

Tasks

1. Enable `gcloud` admin API
2. Create a new instance for cloud SQL for database engine [Engine] with `db-f1-micro` tier in the `asia-southeast1` region.
3. List all the available instances
4. Create a database in the same instance
5. Create a user with password in the same instance
6. Get public IP of the instance
7. Run Cloud SQL Auth Proxy
8. Command to login using mysql/psql shell

Sample Code for reference

```
[
  {
    "task": "Command to setup the project",
    "command": "gcloud config set project [project_id]",
    "terminal_output": "Project set to [project_id]"
  },
  {
    "task": "List all storage buckets",
    "command": "<Your command here>",
    "terminal_output": "<your terminal output here>" OR "null"
  },
]
```

Submission Form Link: https://forms.gle/g4obV2b1Eaoh5uwU8
Deadline: May 10th 2025

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