Step-by-Step Guide: Installing and Running GDE on Ubuntu

1. Update the system:

   sudo apt update && sudo apt upgrade -y

2. Install curl if not already installed:

   sudo apt install curl -y

3. Download and install Google Cloud SDK using curl:

   curl https://sdk.cloud.google.com | bash

4. Restart the shell:

   exec -l $SHELL

5. Initialize the Google Cloud SDK:

   gcloud init

6. Authenticate and configure Google Cloud CLI:

   gcloud auth login

7. Set your default project:

   gcloud config set project YOUR_PROJECT_ID

8. Install App Engine SDK for Python:

   gcloud components install app-engine-python

9. Create a directory for your Flask app:

   mkdir helloworld && cd helloworld

10. Create app.yaml file for Google App Engine:

    nano app.yaml

Add the following content:

```
runtime: python39

entrypoint: python main.py
```

11. Create main.py (Flask application):

    nano main.py

    Add the following Python code:

```python
from flask import Flask

app = Flask(__name__)

@app.route('/')
def hello():
    return "Hello, World!"

if __name__ == '__main__':
    app.run(host='0.0.0.0', port=8080)
```

12. Install Flask (without virtual environment):

    sudo apt install python3-flask -y

13. Run the Flask app locally:

    python3 main.py

14. Deploy to Google Cloud (GDE):

    gcloud app deploy

15. View the deployed app:

    gcloud app browse