Deployment in Render

Steps to Set-up Render Manually

1. Create an Account in render using Github
2. Create PostgreSQL database on render
3. Keep the internal db URL and external db URL
   a. Internal URL look like: dpg-d3tlvnhr0fns73ajqcjg-a
   b. External URL look like:
      postgresql://demo_app_k7v1_user:FX2po67NuhaIynVgEO8IQnNPU1TkLk4t@
      dpg-d3tlvnhr0fns73ajqcjg-a.oregon-postgres.render.com/demo_app_k7v1
4. While setting-up the db choose free tier for now as this is a demo Project
5. Keep the allowed IP 0.0.0.0/0 that is open to all for now
6. In the local env open CMD
7. Run the command:
   pg_dump -U <local_username> -h localhost -p 5432 -F p -b -v -f
   backup.sql <database_name>

   Where Flags Signifies

Flag	Meaning	Typical Use
-F p	Output format = plain SQL	For .sql dumps you can open/edit
-b	Include binary large objects	Keep all data types
-v	Verbose output	Show progress details
-f backup.sql	Write to file	Save dump to disk

8. Then move back to render dashboard and get the connect tab
   a. There we can see something like:
      postgres://<render_user>:<render_password>@<render_host>:543
      2/<render_dbname>
   b. Now to connect to the psql from cmd we can the command like:

```
C:\Users\mayou>psql "postgresql://demo_app_k7v1_user:FX2po67NuhaIynVgEO8IQnNPU1TkLk4t@dpg-d3tlvnhr0fns73ajqcjg-a.oregon-
postgres.render.com/demo_app_k7v1?sslmode=require"
psql (18.0, server 17.6 (Debian 17.6-1.pgdg12+1))
WARNING: Console code page (437) differs from Windows code page (1252)
        8-bit characters might not work correctly. See psql reference
        page "Notes for Windows users" for details.
SSL connection (protocol: TLSv1.3, cipher: TLS_AES_128_GCM_SHA256, compression: off, ALPN: none)
Type "help" for help.

demo_app_k7v1=>
```

        C. If it is unrecognized then we need to setup the psql bin folder to system env path

9. Now copy the backup db tables to render by using cmd like:

psql "postgresql://demo_app_k7v1_user:FX2po67NuhaIynVgEO8IQnNPU1TkLk4t@dpg-d3tlvnhr0fns73ajqcjg-a.oregon-postgres.render.com/demo_app_k7v1?sslmode=require" -f backup.sql

10. Inside settings.py configure you db with the render given username, password, db name, db engine, host and port
11. Inside the Project File manage.py create a Procfile that will contain web: gunicorn project name.wsgi
12. Now push your latest code to github
13. Now in Render Connect with Github
14. There choose the correct Repo
15. Choose the Branch as Main
16. In the build select Python and the version
17. Choose the instance type as free for now
18. Click Deploy and its done.