Python Virtual Environment - Command Summary & Mini Project

Virtual Environment Command Summary

1. Check Python Version:

   > python --version

2. Create Virtual Environment:

   > python -m venv myenv

3. Activate Virtual Environment:

   Windows: > myenv\Scripts\activate

   Linux/Mac: > source myenv/bin/activate

4. Install a Package (e.g., numpy):

   > pip install numpy

5. Deactivate Virtual Environment:

   > deactivate

6. Save Installed Packages:

   > pip freeze > requirements.txt

7. Install from requirements.txt:

   > pip install -r requirements.txt

Mini Project: Weather Fetcher

Goal: Create a Python script that fetches weather data using the `requests` library.

Steps:

1. Create a folder: weather_app

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2. Inside, run: python -m venv venv

3. Activate the environment

4. Install requests: pip install requests

5. Create `app.py` with the following code:

--- Python Code ---

```
import requests

city = input("Enter city: ")
response = requests.get(f"https://wttr.in/{city}?format=3")
print(response.text)
```

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6. Run your script: python app.py

7. Save dependencies: pip freeze > requirements.txt

8. Share your project with others including `requirements.txt`