

error:

Your issue is caused by **PEP 668**, which prevents system-wide pip installations in Ubuntu 22.04+ due to it being an externally managed Python environment.

Solution: Use a Virtual Environment

Modify your Dockerfile to install Python packages inside a virtual environment:

Updated Dockerfile

I'll modify your existing Dockerfile to:

1. Install python3-venv.
 2. Create a virtual environment at /home/venv.
 3. Install required Python libraries inside the virtual environment.
 4. Use this virtual environment when running Python.
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commands:

Run the following command in the directory containing your Dockerfile. bd-a1-image is the name of the Docker image. The . at the end refers to the current directory.

```
docker build -t bd-a1-image .
```

Run the container with

```
docker run -it bd-a1-image
```

inside the container run the following:

```
python3 -c 'import pandas, numpy, seaborn, matplotlib, sklearn, scipy; print("All packages work!")'
```