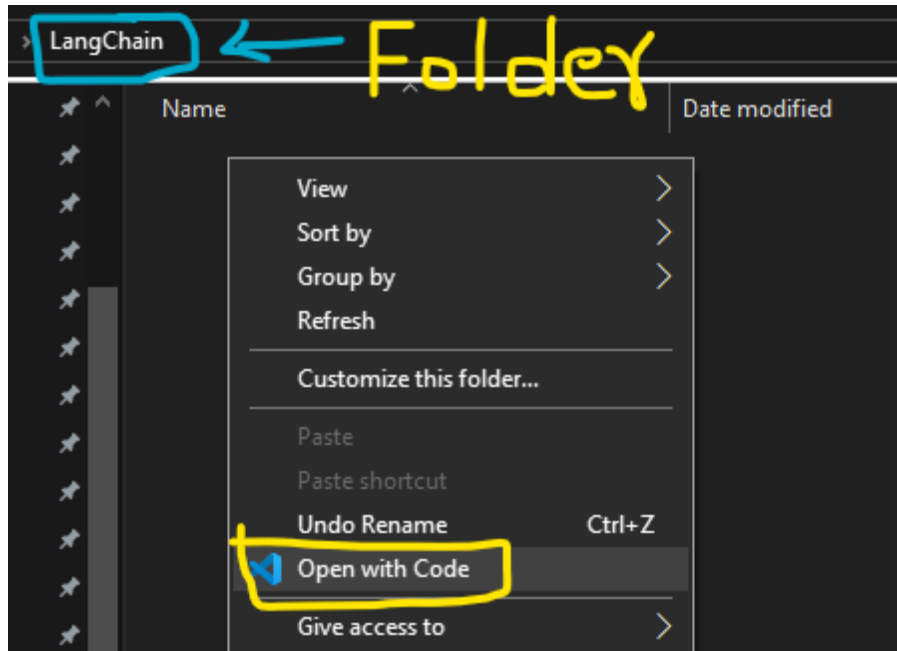
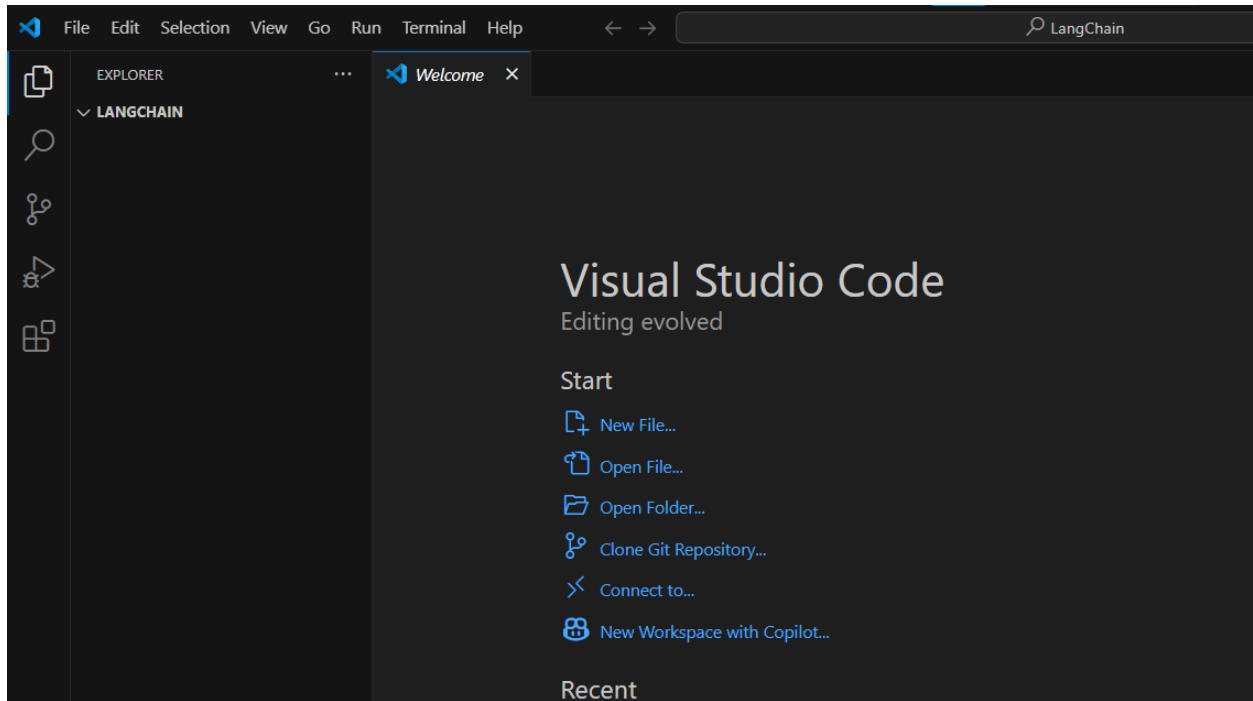


# Create Virtual Environment

- Inside Langchain folder, right click → Open with code



- This will open the folder inside VS Code:



## Open Terminal:

- `ctrl + J`

```
$ python -m venv myenv
```

## Activate the environment:

```
source myenv/Scripts/activate
```



**The above commands only work for BASH**

Create a `requirements.tx` file:

```
1 langchain
2 ipykernel
```

```
langchain  
python-dotenv
```

```
# LangChain Core  
langchain-core
```

```
# OpenAI Integration  
# langchain-openai  
# openai
```

```
# Anthropic Integration  
langchain-anthropic
```

```
# Google Gemini (PaLM) Integration  
langchain-google-genai  
google-generativeai
```

```
# Hugging Face Integration  
langchain-huggingface  
transformers  
huggingface-hub
```

```
# Environment Variable Management  
python-dotenv
```

```
# Machine Learning Utilities  
numpy  
scikit-learn
```

```
ipykernel
```

```
pip install -r requirements.txt
```

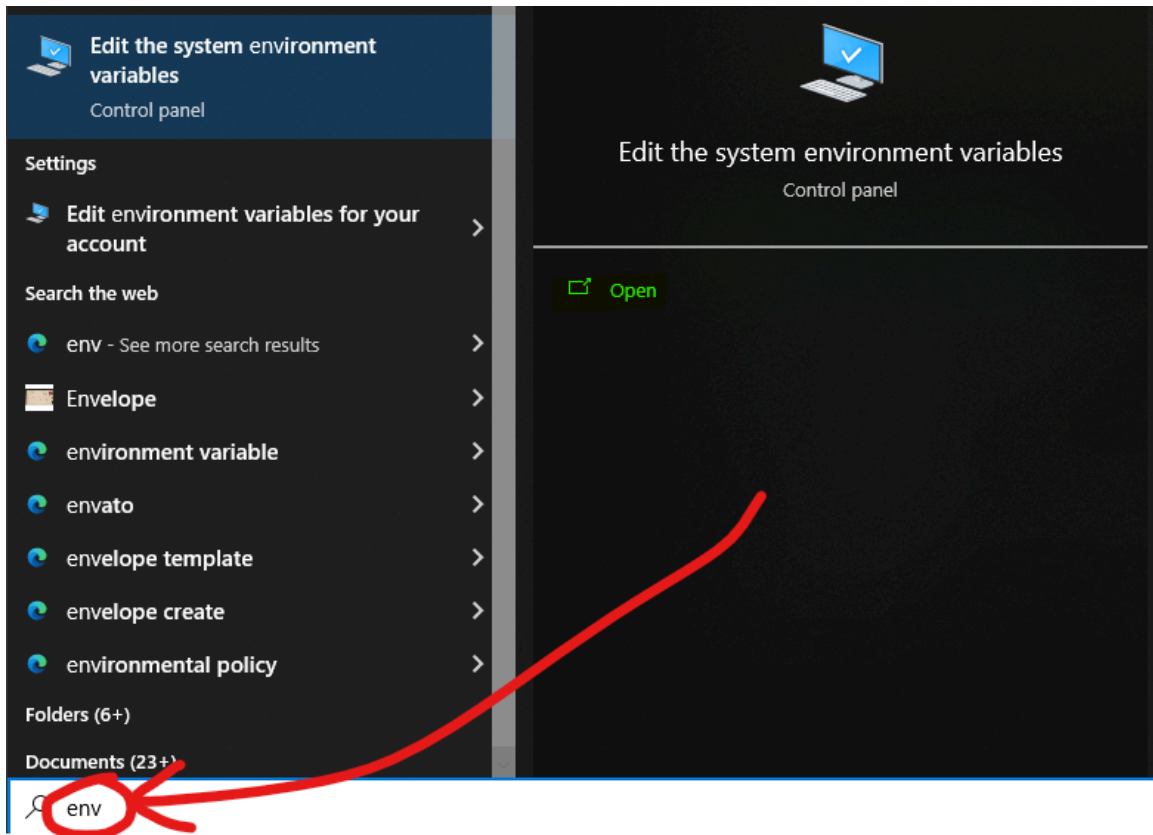
```

Using cached sniffio-1.3.1-py3-none-any.whl.metadata (3.9 kB)
Downloading langchain-0.3.25-py3-none-any.whl (1.0 MB)
  1.0/1.0 MB 8.0 MB/s eta 0:00:00
Downloading langchain_core-0.3.60-py3-none-any.whl (437 kB)
  437.9/437.9 kB 9.1 MB/s eta 0:00:00
Downloading langchain_text_splitters-0.3.8-py3-none-any.whl (32 kB)
Downloading langsmith-0.3.42-py3-none-any.whl (360 kB)
  360.3/360.3 kB 10.9 MB/s eta 0:00:00
Using cached pydantic-2.11.4-py3-none-any.whl (443 kB)
Using cached pydantic_core-2.33.2-cp312-cp312-win_amd64.whl (2.0 MB)
Using cached PyYAML-6.0.2-cp312-cp312-win_amd64.whl (156 kB)
Using cached requests-2.32.3-py3-none-any.whl (64 kB)
Downloading sqlalchemy-2.0.41-cp312-cp312-win_amd64.whl (2.1 MB)
  2.1/2.1 MB 10.4 MB/s eta 0:00:00
Using cached annotated_types-0.7.0-py3-none-any.whl (13 kB)
Using cached certifi-2025.4.26-py3-none-any.whl (159 kB)
Using cached charset_normalizer-3.4.2-cp312-cp312-win_amd64.whl (105 kB)
Downloading greenlet-3.2.2-cp312-cp312-win_amd64.whl (296 kB)
  296.2/296.2 kB 6.1 MB/s eta 0:00:00
Using cached httpx-0.28.1-py3-none-any.whl (73 kB)
Downloading httpcore-1.0.9-py3-none-any.whl (78 kB)
  78.8/78.8 kB ? eta 0:00:00
Using cached idna-3.10-py3-none-any.whl (70 kB)
Downloading jsonpatch-1.33-py2.py3-none-any.whl (12 kB)
Downloading orjson-3.10.18-cp312-cp312-win_amd64.whl (134 kB)
  134.8/134.8 kB 7.8 MB/s eta 0:00:00
Using cached packaging-24.2-py3-none-any.whl (65 kB)
Downloading requests_toolbelt-1.0.0-py2.py3-none-any.whl (54 kB)
  54.5/54.5 kB 2.8 MB/s eta 0:00:00
Downloading tenacity-9.1.2-py3-none-any.whl (28 kB)

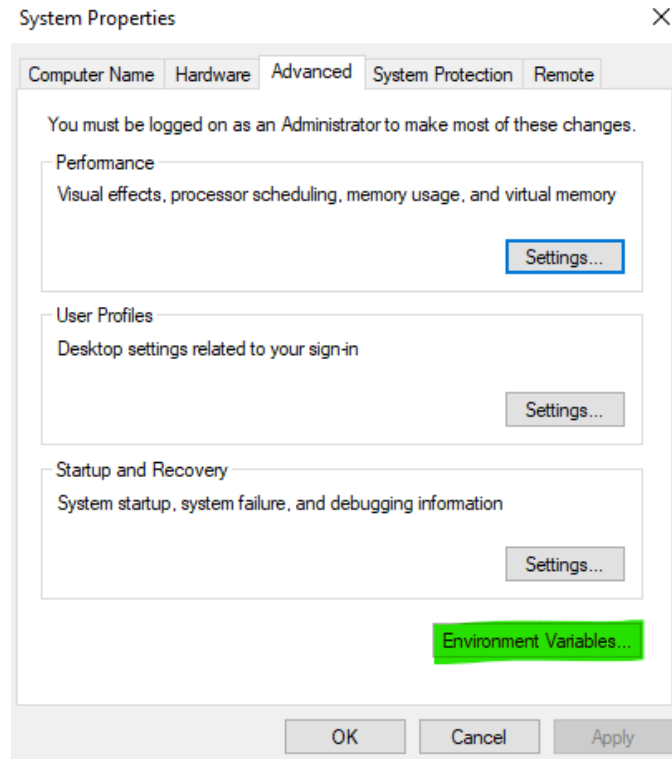
```

## With Conda:

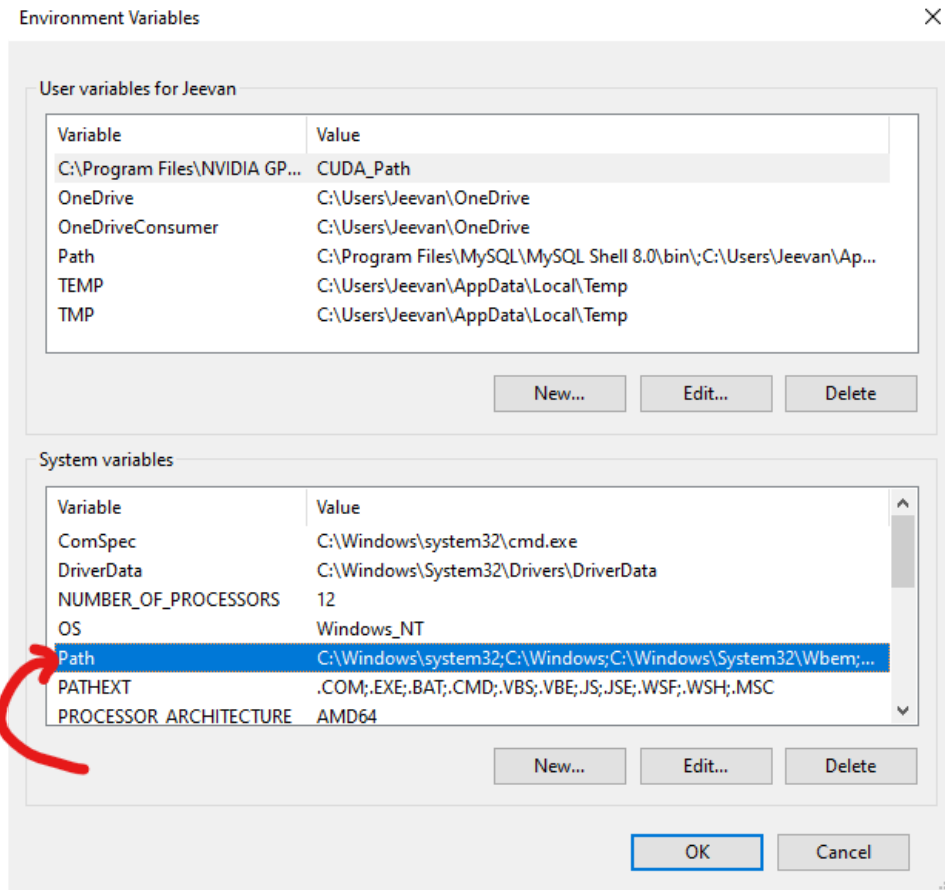
- Install Anaconda or Miniconda
- Find the installation folder
- Go to **condabin**
  - C:\Users\Jeevan\miniconda3\condabin
- Copy the path
- Type "env" and open the following



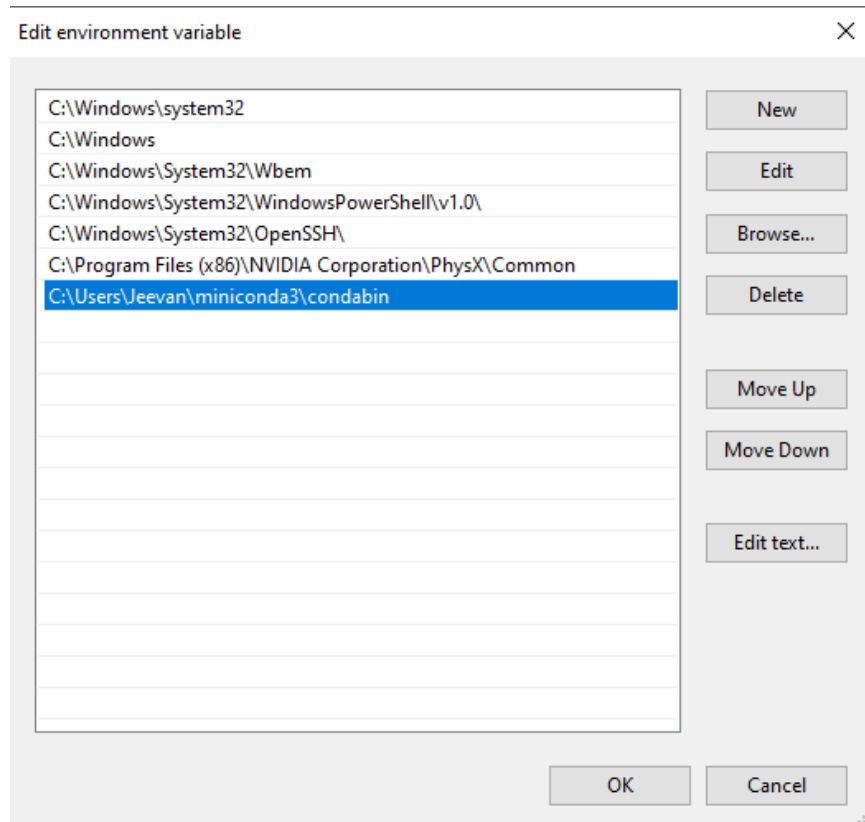
- Click ***environment variables***



- Double click Path



- Double click in the black space and add the copied path



- Press OK and restart the terminal

## Create the venv with Conda

```
conda create -p venv python==3.10
```

## Create a **requirements.txt** file:

```
langchain  
python-dotenv
```

```
# LangChain Core  
langchain-core
```

```
# OpenAI Integration
```



```
# langchain-openai
# openai

# Anthropic Integration
langchain-anthropic

# Google Gemini (PaLM) Integration
langchain-google-genai
google-generativeai

# Hugging Face Integration
langchain-huggingface
transformers
huggingface-hub

# Environment Variable Management
python-dotenv

# Machine Learning Utilities
numpy
scikit-learn
langchain-community
pypdf
bs4
arxiv
pymupdf
wikipedia
tiktoken
sentence-transformers
langchain-chroma
faiss-cpu
langchain-chroma
```

**Activate the environment:**

```
conda activate "D:\Python Env\LangChain\venv"
```

```
pip install -r requirements.txt
```

- This will take some time and after that you're good to go.

## !!Set VS Code to Auto-Activate the Environment



**We need to activate the venv every time we open vs code. Follow these steps to avoid deactivating it.**

In **any terminal (CMD/PowerShell)** in VS Code, run:

```
conda activate "D:\Python_Env\LangChain\venv"
```

## Set VS Code to Auto-Activate the Environment

1. Open the **Command Palette** ( **Ctrl+Shift+P** ).
2. Search for:CopyDownload

Python: Select Interpreter

3. Choose the Python executable from your **venv**:CopyDownload

D:\Python\_Env\LangChain\venv\python.exe

*(VS Code will now auto-activate this environment in new terminals.)*

## Ensure Conda is Initialized for VS Code

Run these commands **once** to fix terminal auto-activation:

```
conda init cmd.exe    # For CMD  
conda init powershell # For PowerShell
```

**Restart VS Code** afterward.

## Verify the Environment

Check if the environment is active:

```
conda info --envs
```

- The active env will have a `*` next to it.
- Confirm Python path:

```
where python # Should point to your venv
```