

NexusHive

KEEP LEARNING, KEEP BUZZING



Essential Data Concepts in Python

**Course Name: Python Basics for Data
Enthusiasts; Installing and Setting Up Jupyter
Notebook**



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What Are Python Packages & pip?

- Python Packages: Pre-built code libraries
 - Example: numpy, pandas, jupyter
- pip: Python's default package manager
 - Used to install, upgrade, remove packages
- Comes pre-installed with Python 3.4+

Installing Jupyter Using pip

- Open Terminal (macOS) / PowerShell (Windows)
- Command: `pip install jupyter`
- Ensure Python is already installed
- Wait for confirmation: “Successfully installed jupyter”

Launching Jupyter Notebook

- Run command: `jupyter notebook`
- Opens in your default browser
- If it doesn't, copy the link from terminal and paste in browser
- Jupyter server runs in the background

Exploring the Jupyter Interface

- Notebook name – Click to rename
- Menu bar – File, Edit, View, etc.
- Toolbar – Quick access buttons (save, run, insert cell)
- Main area – Editable cells


Running Code in Cells

- Code is written in cells
- Execute: `Shift + Enter`
- Output appears below
- Add cells: | Remove:
- Execution order shown (In [1], In [2]...)

Using Markdown in Cells

- Convert cell: `Code` → `Markdown`
- Use `#` for headers, `**bold**`, `*italic*`, etc.
- Ideal for writing notes, explanations, headings
- Blends code and documentation beautifully

Saving and Using Checkpoints

- Click  to save, or go to File > Save and Checkpoint
- Checkpoints are save points you can revert to
- Use File > Revert to Checkpoint to restore older versions

Important Tip – Keep Terminal Open

- Terminal runs the Jupyter server
- Closing it ends your Jupyter session
- Solution: minimize, don't close

Recap & What's Next

- ✓ Installed Jupyter using pip
- ✓ Launched and explored the interface
- ✓ Ran Python code and added markdown
- ✓ Learned about checkpoints and usage tips

Up next: Writing your first Python script!