

PYTHON

Decorators, pip, pipx and conda

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What We'll Discuss

TOPIC OUTLINE



What are Decorators?

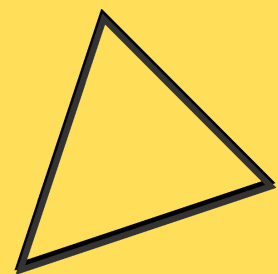
How to use them?

What is pipy?

What is pip?

What is conda?

Difference between conda and pip?



DECORATORS



WHAT IS IT?

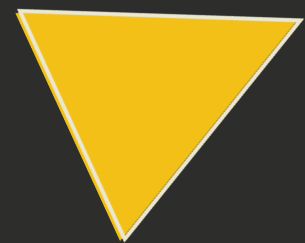
Decorators allow us to wrap another function in order to extend the behavior of wrapped function, without permanently modifying it. It takes in a function, adds some functionality and returns it.

FROM THEORY TO PRACTICE



Practical Applications

HOW TO USE DECORATORS



PIPY

▶ WHAT IS IT?

- **Pipy : Python Package Index**
- **The official third-party software repository for Python**
- **Over 235,000 Python packages can be accessed through Pipy**

PIP

▶ WHAT IS IT?

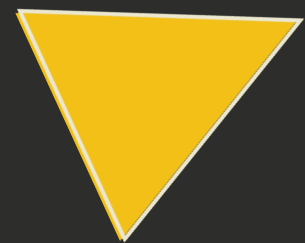
- **Pip is the Python Packaging Authority's recommended tool for installing packages from from PyPI**
- **Installs Python software packaged as wheels or source distributions.**
- **The system should have compatible compilers, and possibly libraries, installed before invoking pip to succeed.**
- **It installs packages like numpy, pandas, matplotlib etc. , along with their dependencies. Different Python resources are delivered in the form of pip packages.**

FROM THEORY TO PRACTICE



Practical Applications

HOW TO USE PIP?



CONDA

▶ WHAT IS IT?

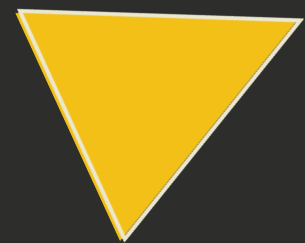
- **Open source package management system**
- **Environment management system**
- **Included in Anaconda**
- **Created for Python but can package and distribute software for any language**
- **Channels are online repositories where conda will look for packages**

FROM THEORY TO PRACTICE

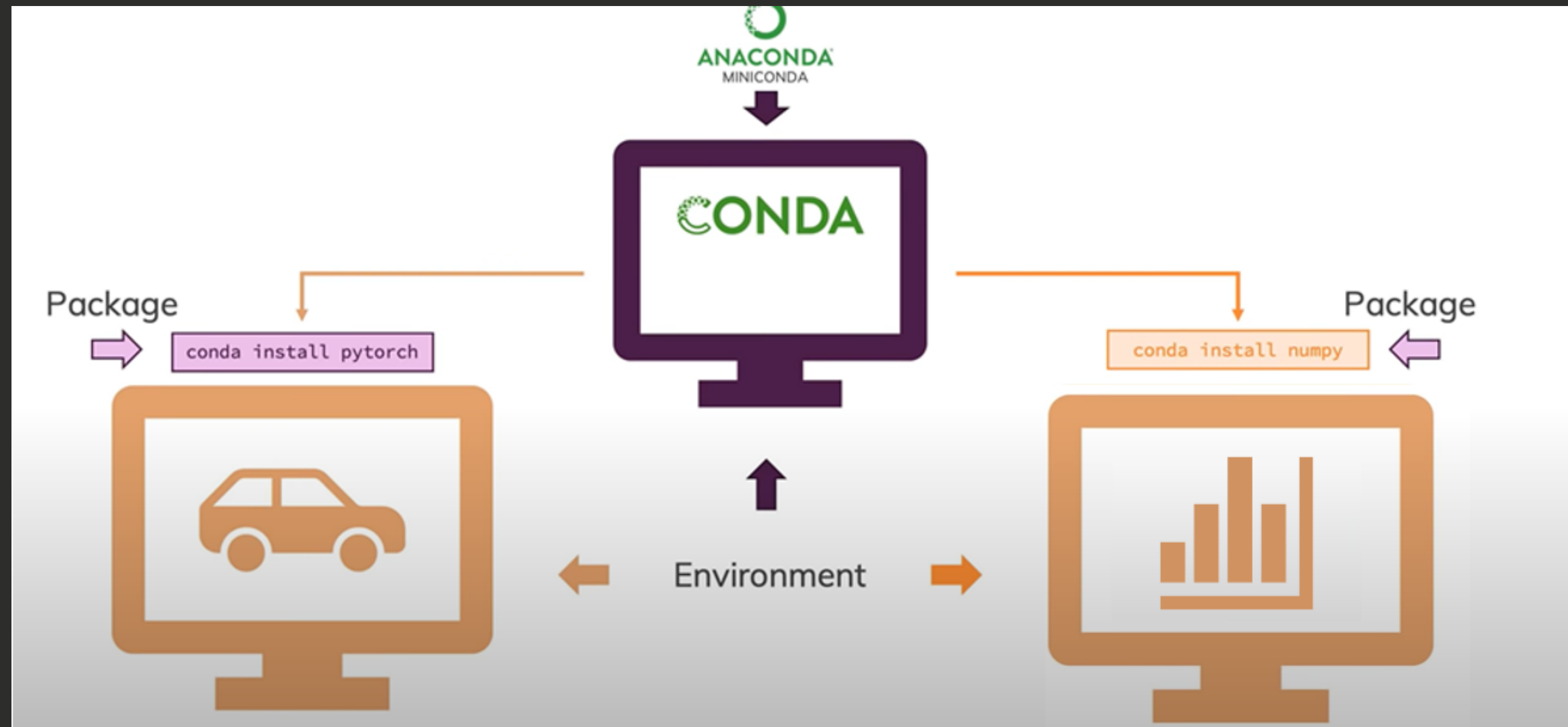


Practical Applications

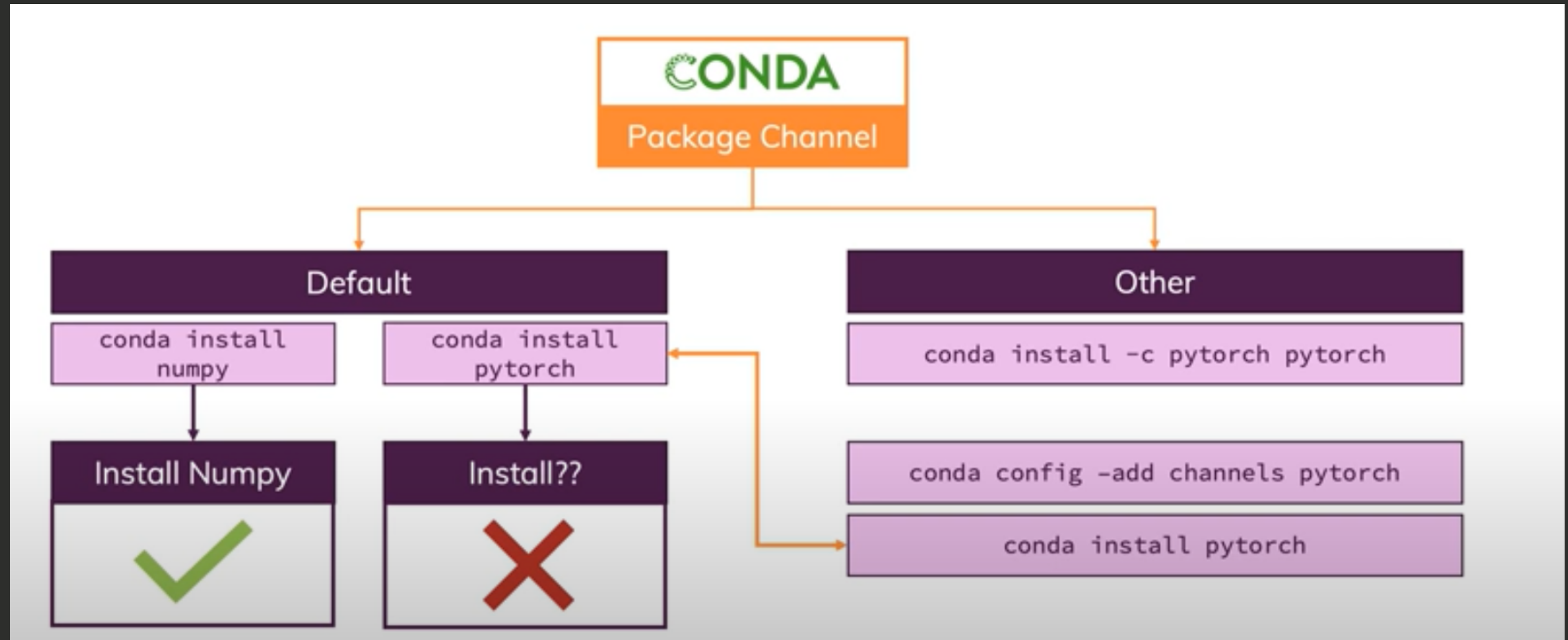
USING CONDA FOR PACKAGES AND ENVIRONMENTS



PACKAGES AND VIRTUAL ENVIRONMENTS

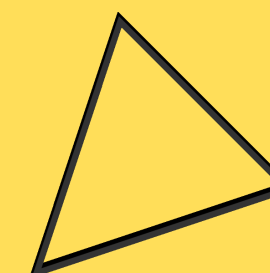
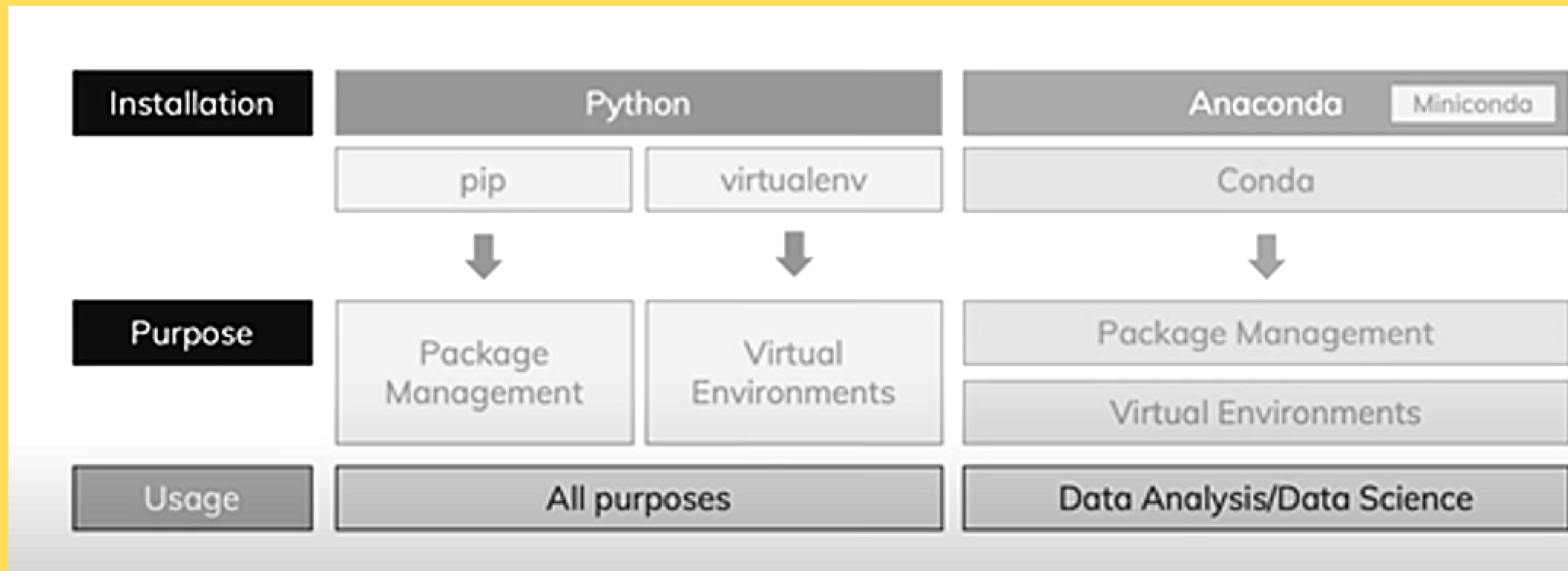
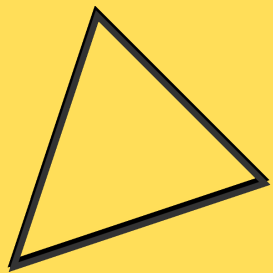


PACKAGES AND CHANNELS



DIFFERENCES BETWEEN PIP AND CONDA

	CONDA	PIP
MANAGES	Binaries	Wheel or Source
REQUIRE COMPILERS	No	Yes
PACKAGES TYPES	Any	Python
CREATE ENVIRONMENT	Yes, built-in	No, virtualenv or venv
DEPENDENCY CHECKS	Yes	No
PACKAGES SOURCES	Anaconda repo & Cloud	PiPy



Thank you!

**HOPE YOU UNDERSTOOD
EVERYTHING**