Visual Studio LIVE! | Las Vegas

EXPERT SOLUTIONS FOR ENTERPRISE DEVELOPERS
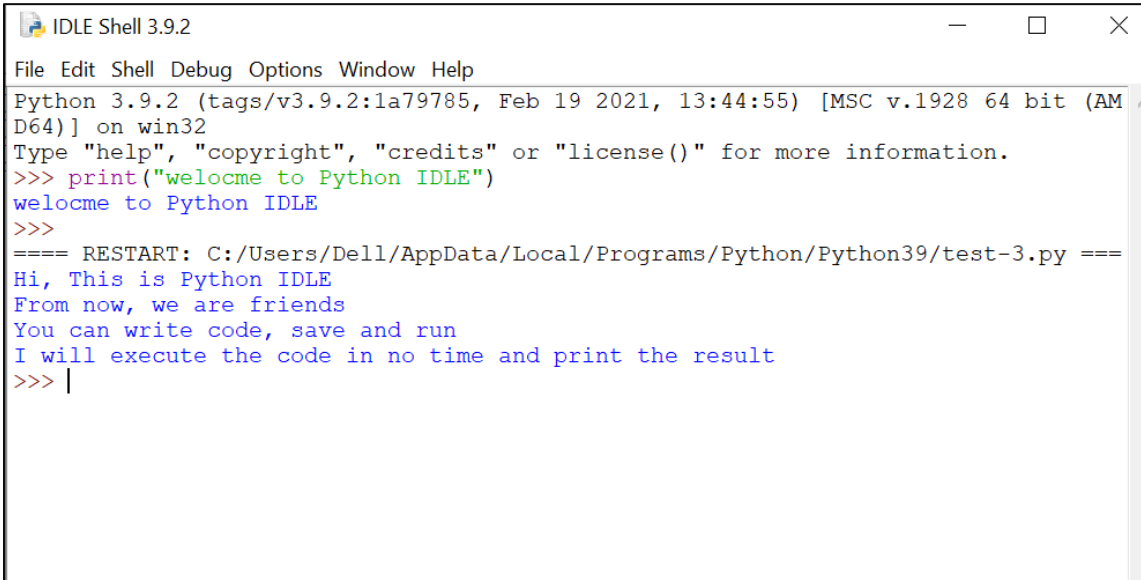
Python

overview

Your Code Powers the World.
Our Training Powers You.

Python IDLE

Integrated Development and Learning Environment

Implementations

- Python has two full production-quality implementations
  - CPython (aka Python)
  - PyPy

IPython

- Power and convenience
- IPython Notebook → Jupyter Notebook

Anaconda

- Includes preconfigured extension modules
- Based on Conda package manager

- Miniconda is a sister to Conda
  - doesn't preload the packages
  - Lighter weight
  - Gives you control for tailored environments

Interpreter

- Python.exe

- Environment variables:
  - PATH
    - where to find Python.exe

  - PYTHONHOME
    - python installation directory with lib

  - PYTHONPATH
    - list of module directories

  - PYTHONSTARTUP
    - python source to execute on start of interpreter

REPL

- Read
- Evaluate
- Print
- Loop

- Interactive session to run python

Python environment

- Context in which a Python program runs
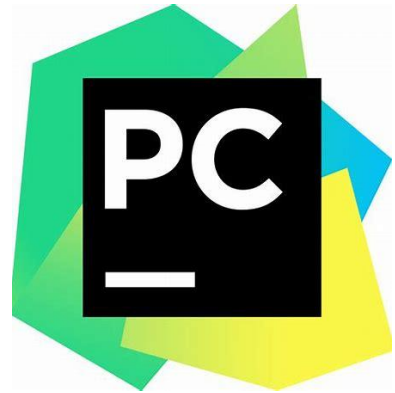 - Interpreter
  - Packages

pip package manifest

requirements.txt

- Export
  - freeze > [file-path-to-requirements.txt]

- Import
  - install –r [file-path-to-requirements.txt]

JetBrains PyCharm

https://www.jetbrains.com/pycharm/

Python Resources

- [3.12.0 Documentation (python.org)](python.org)

- [The Python Tutorial — Python 3.12.0 documentation](#)

- [The Python Language Reference — Python 3.12.0 documentation](#)

- [The Python Standard Library — Python 3.12.0 documentation](#)

- [PEP 0 – Index of Python Enhancement Proposals (PEPs) | peps.python.org](#)

- [PyPI · The Python Package Index](#)

Online Resources

- [Python 3 Tutorial - Learn Python 3 (geeksforgeeks.org)](#)

- [Introduction To Python – GeeksforGeeks](#)

- [Get Started Tutorial for Python in Visual Studio Code](#)

- [Python for beginners - Training | Microsoft Learn](#)

- [Python Tutorial (w3schools.com)](#)

- [Learn Python - Free Interactive Python Tutorial](#)