

Title: Introduction to Python Programming

Python is a high-level, interpreted programming language known for its simplicity and readability. It supports multiple programming paradigms including procedural, object-oriented, and functional programming. Python is widely used in web development, data science, artificial intelligence, machine learning, and automation.

Key Features of Python:

- Easy-to-read syntax that mimics natural language
- Large standard library and active community support
- Interpreted language, allowing quick debugging and iteration
- Dynamic typing and automatic memory management

Popular Python Libraries:

- NumPy and Pandas for data manipulation and analysis
- TensorFlow and PyTorch for machine learning and deep learning
- Flask and Django for web development
- Matplotlib and Seaborn for data visualization

Python is a versatile language, making it ideal for both beginners and professionals.