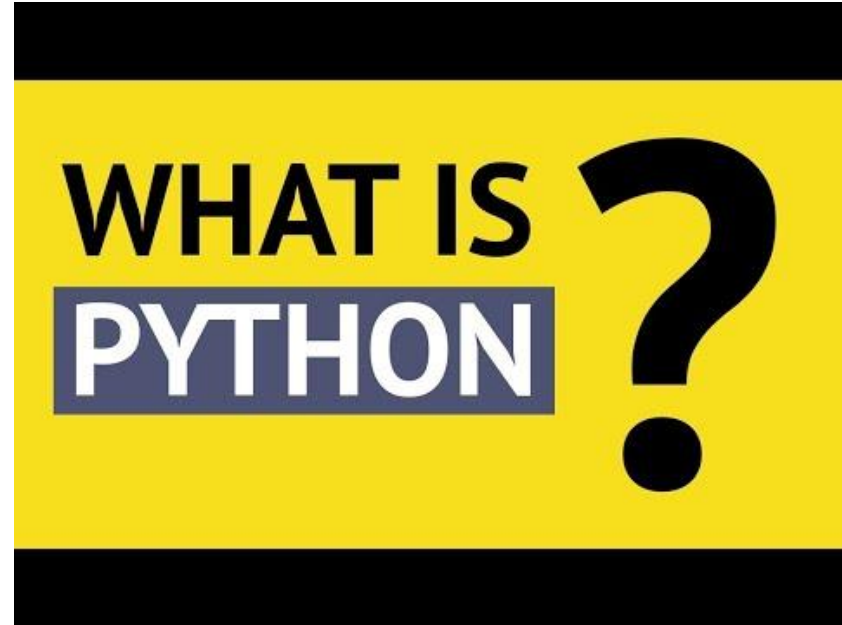# CP 10: Python Programming

What Is Python Programming?

- Easy to learn
- One of the most widely used languages - from game development to machine learning
- Class focuses on learning how to use Python effectively, more than covered in CP 9

Topics Covered

- Variables & Data Types
- User I/O
- Lists & Tuples
- If statements & Logic
- Loops & Iterations
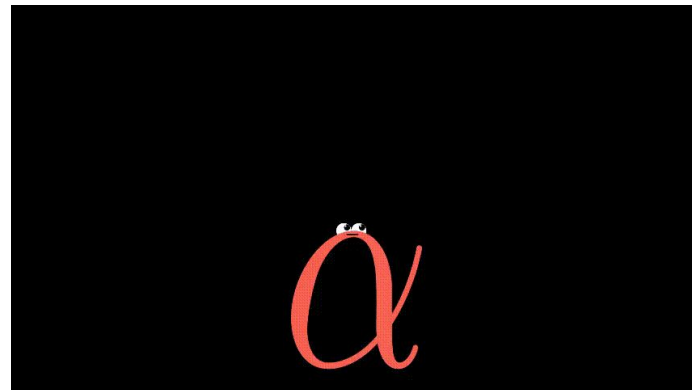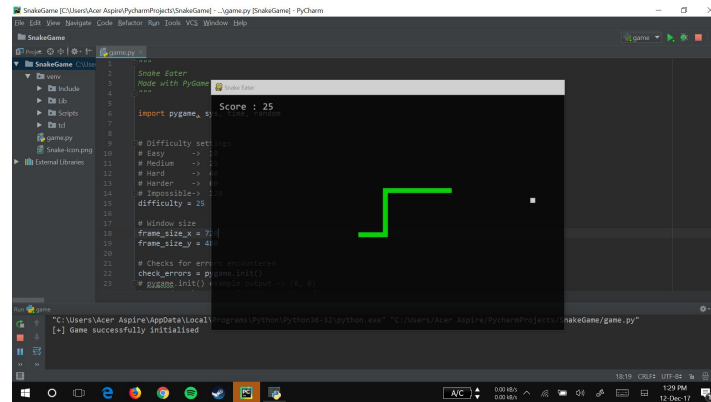- Functions
- Basic Algorithms

General Information

- 3 hours per week
- No prerequisites
- Project oriented course
    - We will spend most of the time coding & solving problems

What Can I do with Python Programming?

- Make classic games like Snake and Oregon Trail
- Code programs to solve equations
- Create cool animations

What Can I Study After Python Programming?

- AP Computer Science Principles (AP CSP)
  - Additional programming topics not covered in Python Programming
  - Get to apply Python to a larger array of problems
- AP Computer Science A (AP CS A)
  - More in-depth coverage of programming topics
- Taking all 3 courses will give you a solid foundation for programming classes in college

Why Take Python Programming?

- Learning to code resembles learning a foreign language more than learning math or science
- Problem solving techniques learned here can be applied to problems in other classes
- Want to make your MSA presentation impressive? Use some Python code! This [video](#) shows how to use Python for math, physics, and music animations