Suggested Python Projects:

1. **Strategy Game** — Build a computer program that allows users to play your favorite board game, such as Connect 4, Boggle, or Scrabble. Then add a computer player who is good enough to defeat most human players. Perhaps we can have multiple computer players battling each other.

2. **Action Game** — This is the most common Catapult computer programming project. Build a computer program that implements a classic game like Asteroids, PacMan, Frogger, or Space Invaders. Or make up your own game! Students with prior programming experience may want to incorporate networking so that multiple players can participate remotely.

3. **Simulation of Random Processes** — Many processes in nature follow certain patterns, but with enough seemingly random elements so that the behavior is unpredictable while remaining within certain constraints. The Markov chain algorithm provides a fascinating simulation of this mechanism, allowing us to generate random sentences in the style of some work of literature.