

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. **Auction Site** — Write a client-server program that allows people to advertise items for sale, to bid on items, to provide feedback on good and bad transactions with other users, etc.
4. **Database Application** — Learn to write a Python program to create and maintain a database. Examples might include cataloguing your CD collection, organizing major league baseball statistics, managing your “little black book” of romantic interests or your school’s grade information for current students, or perhaps simulating an “on-line store” or an on-line catalog of information about your favorite subject.
5. **Spelling Checker / Suggester** — When your document contains a misspelled word, many spell checkers provide suggestions of alternate words. Do you ever get frustrated when your misspelling is very simple (you left out a letter, added an extra letter, or transposed two adjacent letters) but the computer’s list of suggestions does not include the word that you meant to use? Perhaps your checker/suggester can do better!
6. **Make up your own program** — Design and write an imaginative, exciting computer application that may dazzle your friends back home. It can fit one of the above categories, or be something entirely different that you’d like to explore.