

# Robot Goals (Python)

## Summer 2022 HackCamp at Bishop Ireton

Robots:

Can be done in Python, Java, MakeCode and other languages.

1. Assuming Python
  - a. Show python interpreter in powershell
  - b. Show vsCode
  - c. Show python interpreter in vsCode
  - d. Show creating a program in the editor and running it
    - i. Printing
    - ii. Variables
    - iii. Input
    - iv. Printing a shape (initials, pyramid of stars, etc)
    - v. For loop
    - vi. If statement
  - e. Show how to import the Finch in the interpreter
  - f. Use the finch
  - g. Show how to import the Finch in the editor
    - i. Run the FinchTest.py program
    - ii. Challenges
      1. Change the LEDs to all the same color, all different colors
      2. Ask the user what color to make the LED
      3. Move the finch
      4. Move the finch forward and backward
      5. Move the finch in a shape

Other Python Resources:

[42 Exciting Python Project Ideas & Topics for Beginners \[2022\] | upGrad blog](#) (ideas only)

[Cool, Fun & Easy Python Projects for Beginners \(with Code\) \(hackr.io\)](#) (tutorials)

[Finch2 - Python - Program \(birdbraintechnologies.com\)](#) (Finch Tutorials in Python)

