Name:

Partners Name:

Interview your partner. Write down your partner’s answers below. This sheet will be turned into me to help me make class exercises more interesting.

What is your previous experience (if any) with coding/computer science?

What subject do you plan on majoring in or if you aren’t sure yet what topics are you most interested in exploring?

What are the top three apps you use on your smart phone or what are the top three software programs you use on a computer?

If they differ from the above, what are your top three favorite apps and/or software programs to use?

What do you like to do in your free time?
Computational Thinking

Computational thinking is the thought processes involved in formulating a problem and expressing its solution(s) in such a way that a computer—human or machine—can effectively carry out.

1. The following is an algorithm someone wrote for brushing your teeth:

   1. Wet the tooth brush
   2. Put toothpaste on the toothbrush
   3. Brush each side of your teeth for 30 seconds
   4. Spit
   5. Rinse

   Is this algorithm executable? If not, revise it.

2. Write an algorithm to sweep the floor:
Exchange with your neighbor and compare what you have written. Are your algorithms the same? Are they both executable? Is there anything you are missing?

3. For this exercise you will work with a partner.

1. Turn away from your partner so you cannot see their worksheet and draw something in the box below. Do not look at what your partner is drawing!
2. On this sheet of paper write an algorithm explaining how to recreate the drawing you just drew.

3. Exchange instructions with your partner. Follow the instructions you have just received to create a drawing in the box below.
4. Compare your drawings. How well does what you drew match up with what they originally drew? How can you improve your instructions?
Introduction to Python Programming

A **program** is a sequence of instructions that specifies how to perform a computation.

1. What is the output of the following statements? If an error occurs, which type of error? Then fix the error.

   ```python
   print("I am so excited to learn Python!")
   ```

2. ```python
   print("six times seven is . . . ")
   ```

   6 + 7
3. `print("Hello, world")`

4. `print("the chance of precipitation today is:"))
   
   `print(7 / 10 * 100)`  # calculate percentage
   
   `print("%")`

5. `print(16 / (5 - 5))`