#### Announcements

- 1. No homework for the next week.
- 2. In-person midterm exam is on Oct 19 (same time/location as lectures).
  - 1. Includes CH1-CH6 ZyBook (participation/challenge activities), lab exercises and homework assignments.
  - 2. One-page double sided cheat sheet is allowed.
  - 3. Format: Pen & Paper (no computers!).
- 3. Today's lecture: Coding practice.

## Print Multiples of 5

Write a program that reads in a positive integer value from the keyboard and uses a for loop to print the multiples of 5 that are less than or equal to the number that was entered.

For example:

Enter a positive integer: 22

5

10

15

20

# Calculate Average

Write a function called calculate\_average that receives a list of integer values and calculates the average of the values in the list. Your function should return 0 if there are no elements in the list.

#### **Compare Lists**

Write a function called compare\_lists that receives two lists of integer values. The function should return true if all of the elements in the first list are contained in the second list (but not necessarily in the same order).

### Add Spaces

Write a function called add\_spaces that takes a string as input and uses a loop to print each character of the string on the same line with 3 spaces between each letter.

For example:

Computer

# List to String

Write a function called list\_to\_string, that takes a list as a parameter and returns a string with each element of the list on its own line.

For example:

khoury

college

### Tuple to List

Write a function called convert\_tuple that takes a tuple as a parameter and returns a list that contains all of the same elements in the same order.

Note: Tuple is faster than List!

Tuple: (1,3,5)

List: [1,3,5]

### Looping over a sequence in reverse

Prints a list that is ordered alphabetically, then prints the same list in reverse order.

For example:

Biffle | Bowyer | Busch | Gordon | Patrick |

Printing in reverse:

Patrick | Gordon | Busch | Bowyer | Biffle |

### Brute Force Equation Solver

Given integer coefficients of two linear equations with variables x and y, use brute force to find an integer solution for x and y in the range -10 to 10.

For example:

Ex: 8x + 7y = 38 and 3x - 5y = -1 have a solution x = 3, y = 2