**EXERCISE 1 (~ 20 minutes)**

**Write code using indefinite iteration to get inputs from a user. Tell the user that they should enter integers; you can assume the user will correctly enter integer values.**

**Collect the input into a list, and keep collecting input until the user types either** exit **or** EXIT**. (Do not collect the string *exit* or *EXIT* into the list, but when you collect the rest of the input into the list, each item should be type *integer*.)**

**CHALLENGE:** Try this using multiple 'patterns' for indefinite iteration, but have your two sets of code do exactly the same thing.

**EXERCISE 2 (~ 35+ minutes)**

**Define a function called** most\_common\_elem.

**INPUT:** 1 input, a list

**RETURN VALUE:** the element in the list that is the MOST COMMON element (the element that occurs most frequently in the list)

You may assume that there will always be 1 element that is *most* common.

You can see an *example* invocation of this function (once it is defined) at the bottom of this sheet.  
  
**Your process:**

* Make a plan or draw a diagram
* Write pseudocode
* Try writing the code, bit by bit -- test it out as you go!

**EXAMPLE INVOCATION, given that the function is correctly defined above -- you should be able to run this code:**

lp = [5,"six","six",6,6,6,6,6,7]

res = most\_common\_elem([1,2,2,2,3,4,2])

print(res) # should print: 2

print(most\_common\_elem(lp)) # should print: 6