**Practice Problems for Lists**

1. Given the statements

lst = [3, 0, 1, 5, 2]

x = 2

evaluate the following expressions:

(a) lst[0]?

(b) lst[3]?

(c) lst[x]?

(d) lst[-x]?

(e) lst[x + 1]?

(f) lst[x] + 1?

(g) lst[lst[x]]?

(h) lst[lst[lst[x]]]?

1. Provide list comprehension for each of the following lists
2. [0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1]
3. [(‘a’, 2), (‘b’, 3), (‘c’, 4)]
4. Assume the lists **numbers1** has 100 elements and **numbers2** is an empty list. Write

code that copies the values in numbers1 to numbers2. Hint: use one of the list methods we have discussed.

1. Write a Python program to find the list of words that are longer than **n** from a given list of words?
2. Write the list represented by each of the following expressions.

(a) [8] \* 4

(b) 3 \* [2, 7]

(c) [1, 2, 3] + ['a', 'b', 'c', 'd']

1. Write the list represented by each of the following list comprehension expressions
2. [10\*x for x in range(5, 10)]
3. [x for x in range(10, 21) if x % 3 == 0]
4. [(x, y) for x in range(2) for y in range(3)]
5. Complete the following function that adds up all the positive values in a list of integers. For example, if list a contains the elements 3,−3,5,2,−1, and 2, the call sum\_positive(a) would evaluate to 12, since 3 + 5 + 2 + 2 = 12. The function returns zero if the list is empty.

**def sum\_positive(a):**