**CSCI 236 Python Programming Fall 2018**

**Chapter 8 Activity 1**

1. Write a Python program to count the number of strings where the string length is 2 or more and the first and last character are same from a given list of strings.

Sample List : ['abc', 'xyz', 'aba', '1221']

Expected Result : 2

1. Write a Python program to get a list, sorted in increasing order by the last element in each tuple from a given list of non-empty tuples.

Sample List : [(2, 5), (1, 2), (4, 4), (2, 3), (2, 1)]  
Expected Result : [(2, 1), (1, 2), (2, 3), (4, 4), (2, 5)]

1. Write a Python program to print a specified list after removing the 0th, 4th and 5th elements.

Sample List : ['Red', 'Green', 'White', 'Black', 'Pink', 'Yellow']

Expected Output : ['Green', 'White', 'Black']

1. Refer to the example in 5.1.4 Nested List Comprehensions. Now assume that we have a 5 by 3 matrix = [[1,2,3],[4,5,6],[7,8,9],[10,11,12],[13,14,15]]. Output the transpose of this matrix using nested list comprehension. Also, you need to show the equivalent code using regular nested for loop implementation.