EXERCISE SET 5 * ANSWER SHEET *
19 pts.
Due Tuesday, April 5th

Lists

1. For the following list in Python that holds the high temperature for each day in a given week, in which the first number is the temperature for Sunday,

    temps = [82, 90, 78, 76, 86, 84, 92]

   Using a for loop, computer and display the average temperature for the week. (4 pts.)

   ```
   sum = 0
   for k in range(0,7):
       sum = sum + temps[k]

   avgTemp = sum / 7
   print 'Average temperature for week was:', avgtemp
   ```

2. For list Values containing an arbitrary number of integer values, give a set of instructions for finding and displaying the smallest value in the list. You must use a for loop for this. (4 pts.)

   ```
   smallest = Values[0]

   for k in range(1, len(Values)):
       if Values[k] < smallest:
           smallest = Values[k]

   print 'The smallest values in the list is:', smallest
   ```

3. For the following list of weekly temperatures for the month of February,

   temps = [[35,38,30,34,27,40,39], [[35,38,30,34,27,40,39], [35,38,30,34,27,40,39], [35,38,30,34,27,40,39]]

   Give a pair of nested for loops that displays that average temperature for each week, and displays the average temperature for the whole month.

   ```
   sumAllTemps = 0
   sumWeekTemps = 0

   for k in range(0, 4):
       for j in range(0, 7):
           sumAllTemps = SumAllTemps + temps[k][j]
           sumWeekTemps = sumWeekTemps + temps[k][j]

       weekAvg = sumWeekTemps / 7
       print "Average weekly temperature:', weekAvg
       sumWeekTemps = 0

   avgAllTemps = sumAllTemps / 28
   print "Average temperature for February:', avgAllTemps
   ```

1