Project 1 **Dr. Mike Borowczak**
COSC 2030
Due Date: 10/26/18 11:59 PM MST
Last Revised: 10/04/18 3:30 PM MST

Problem Statement

You are collecting blood sugar levels from a device an unknown (unbounded) number of times per day. We need to store some aggregate information for a fixed number of days and weeks.

Requirements

Using only Arrays and/or Linked Lists (10 pts) store the following aggregate information for fourteen (14) days and two (2) weeks.

Per Day:

1. Sum of all Blood Sugar Readings (5 pts)
2. Max of all Blood Sugar Readings (5 pts)
3. Min of all Blood Sugar Readings (5 pts)
4. Count of Blood Sugar Readings (5 pts)

Per Week:

1. Sum of all Blood Sugar Readings (5 pts)
2. Max of all Blood Sugar Readings (5 pts)
3. Min of all Blood Sugar Readings (5 pts)
4. Count of Blood Sugar Readings (5 pts)
5. Day of Week (x) with Biggest Day-to-Day Delta of Readings (5 pts)
   (e.g. for which x in days 1 to 6, is $|count[x] - count[x-1]|$ the greatest?)

User Interaction

1. A user should input values interactively, any positive numerical value (int or float) should be accepted for blood sugar. (4 pts).
2. Zero and negative numbers should be silently ignored. (4 pts)
3. Letter 'D' or word 'Day' should show the daily summary thus far. (4 pts)
4. Letter 'W or word 'Week' should show the Weekly summary thus far. (4 pts)
5. Letter 'N' or word 'Next' should increment to the next day (4 pts).

Hints and Limitations

Hints may be available later, based on questions. Limitations - we're only storing the first 14 days / 2 weeks of data - your program may display summarys after max input reached. You may ONLY use arrays/linked-lists (e.g. no vectors, stacks, queues, maps etc).