**Computer Science 1 – Grading Criteria Program 1: *UCF KnightsBall Lottery***

**Total: 100 Points**

# Following Development Guidelines (15 pts)

1. Used a reasonable struct to store information about one lottery ticket. (4 pts)
2. Used a dynamically allocated array to store all the ticket information. (7 pts)
3. Used an enumerated type to aid program readability. (4 pts)

# Use of Algorithms (15 pts + 10 possible bonus points)

1. Has a correct algorithm to check the number of matches. (12 pts)
2. Properly matches the number of correct numbers with the winning amount (3 pts)

Here's the link to the PDF slides that shows the O(n) algorithm:

<http://www.cs.ucf.edu/courses/cop3502/sum2011/notes/COP3502_3_SortedListMatch.pdf>

# Execution Format Points (15 pts)

1. Opens the file properly (4 pts)
2. Properly reads in information from the file into the array of dynamically allocated structs. (4 pts)
3. Properly reads in the winning lotto combination (3 pts)
4. Properly writes to the output file (4 pts)

# Execution Points (40 pts)

**1.** The input.txt file we use has 80 tickets. There are 10 winners\*\*\*. So basically award 4 points per correct winner. Also, deduct 1 or two points per incorrectly stated winner (1 or 2 points depending on the severity of the error). \*\*\* Use winning combo: 4 12 29 32 36 46

# Documentation and Style (15 pts)

1. Header comment with name, date, assignment info, etc. (4 pts)
2. Ample comments within the code. (5 pts)
3. Reasonable use of white space. (2 pts)
4. Reasonable indenting. (2 pts)
5. Reasonable variable names. (2 pts)