

## COP 1334C Homework 8

For the following programs:

- 1) Create an algorithm
- 2) Code the program
- 3) Upload to your homework/homework8 folder.

### Winning Division (10 points)

*winningalg.txt, winning.cpp*

This program should calculate which division(SE,NE,SW,NW) had the greatest sales for the quarter. It should use the following functions:

- *float GetSales(string)* is passed the name of a division.  
*Example: GetSales("SW")*  
It asks the user for a division's quarterly sales figure, validates the input, and then returns it. It should be called once for each division.
- *void FindHighest(float,float,float,float)* is passed the four sales totals. It determines which is the largest and prints the name of the high grossing division, along with its sales figure.

*Input validation:*

*Do not accept dollar amounts less than \$100.*

### Lowest Score Drop (15 points)

*lowestscorealg.txt, lowestscore.cpp*

Write a program that calculates the average of a group of test scores, where the lowest score is dropped. It should use the following functions:

- *void GetScore(float&)* should ask the user for a test score, store it in a reference parameter variable, and validate it. This function should be called by main for each of the five test scores.
- *void CalcAverage(float,float,float,float,float)* should calculate and display the average of the four highest scores. This function should be called once by main, and should be passed the five test scores.
- *float FindLowest(float,float,float,float,float)* should find and return the lowest of the five scores passed to it. It should be called by *CalcAverage*, which uses the function to determine which one of the five scores to drop.

*Input Validation:*

*Do not accept test scores lower than 0 or higher than 100.*