## ITEC 2150 Spring 2015 Test 1 Extra Credit

We are writing a reporting program to help track the results of football games. We have been provided an interface to help with this tracking. Please the code necessary to make this work.

- You have been given a Football interface.
- You need to create a class, FootballScore which will implement the methods in the Football Interface.
- FootballScore should have a way of storing multiple game scores. You do not know how many will be stored and are not allowed to ask the user to enter the number of games.
- Game scores are entered in pairs, the home team and then the visiting team. You can store these however you like. The scores will be treated as a pair of scores when you process these later.
- getCount should return the number of games that are stored.
- getMaxScore should return the highest number of points scored.
- getMinScore should return the lowest number of points scored.
- getAverage should report the average of all of the scores. When reporting this, it should be displayed using 2 decimal places
- enterScore should accept the home and visitor team scores and add them to the container in FootballScore.
- getGameScores should print a well formatted score telling the user the winning team and the game score.
- All input and output must be done in the FootballTester.
- You must handle invalid input in FootballTester to prevent invalid entries from causing your program to crash.

## Sample output:

Enter the home team score for game 1. Enter a negative number to quit.

a

Enter the home team score for game 1. Enter a negative number to quit.

24

Enter the visiting team score for game 1

14

Enter the home team score for game 2. Enter a negative number to quit.

21

Enter the visiting team score for game 2

d

Enter the visiting team score for game 2

28

Enter the home team score for game 3. Enter a negative number to quit.

24

Enter the visiting team score for game  $\boldsymbol{3}$ 

24

Enter the home team score for game 4. Enter a negative number to quit.

42

Enter the visiting team score for game  $4\,$ 

3

Enter the home team score for game 5. Enter a negative number to quit.

-1

The maximum score entered is: 42
The minimum score entered is: 3
The average score is 22.50
The home team won with a score of 24 to 14
The winiting team won with a score of 21 to 2

The visiting team won with a score of 21 to  $28\,$ 

The game was a tie, 24 to 24

The home team won with a score of 42 to 3

## Rubric:

Code standard compliance – 2 getMaxScore implementation and use - 2 getMinScore implementation and use - 2 getAverage implementation and use - 4 getCount implementation and use - 2 getGameScore implementation and use - 5 FootballTester - 3