Due Date: BEFORE UNIT 1 TEST

Coding Assignment 1 - Fantasy Sport Statistics

Read the article: https://thisisstatistics.org/statistics-behind-fantasy-football/

Driving Question: You want to create an app (program) to calculate your fantasy team stats.

Refer to https://www.fantasypros.com/scoring-settings/ for scoring guidelines for football – you may use any sport you like, including eSports. No two assignments should match.

- Print out the type of sport you've chosen and your made up scoring guidelines for that sport.
- Create 2 fantasy teams. At a minimum, each team should consist of 3 members. Ask the user the name of their team and then input the names for each player. Calculate each player's stats randomly. Make sure you use the scoring guidelines you defined when calculating the stats. Total the points for each player AND the total for your team.
- Output the team name, roster with each player on one line with their points, and then line with total points labeled and calculated. (Make sure to do this for both teams)
- Determine a winner and output that to the screen
- Create a logo that prints out for the winning team

A Java template can be found on Schoology (Unit #1). All submissions will be done through Schoology. Submit only the **.pdf** file. **Do NOT turn in code that does not COMPILE** – it will NOT be graded or earn any credit. If you have questions about code, ATTACH your file to an email and send to pclaguna@fcps.edu.

Grading rubric out of 40 points:

Scoring guidelines for league shown and are understandable to user (minimum of 3 ways to score): *3 points*

Asks for player names/input correct: 2 points

Must use at least 3 variables: 2 points

Must use at least 3 numbers for calculation stats: 2 points

Must use Math.random() with a starting number >0: 2 points

Must use Math.random() with at least 2 different ranges: 2 points

Calculations follow scoring guidelines for each player: 3 points

Output team stats and total: 3 points

Output combines Strings and numeric types: 2 points

Team total correct: 2 points

Determine a winner with the 2 teams and print to the screen: 2 points

Include Ascii art for the winning team logo: 5 points

Output formatted nicely (tabs, spaces): 2 points

Braces aligned and spelling on output correct: 3 points

Make sure your code includes comments and the header/algorithm: 5 points

EXAMPLE 1

//Scoring guidelines and sport name printed out here

What is the name of the fantasy team?

Football 100

What is the Running Back's name?

Taylor

What is the Wide Receiver's name?

Smith

What is the Quarterback's name?

Nelson

Team Football 100:

Running Back, Taylor, with 49 points
Wide Receiver, Smith, with 150 points

Quarterback, Nelson, with 47 points

Team Football 100 total: 246

What is the name of the fantasy team?

Football 200

What is the Running Back's name?

Gavin

What is the Wide Receiver's name?

Thompson

What is the Quarterback's name?

Kim

Team Football 200:

Running Back, Gavin, with 63 points

Wide Receiver, Thompson, with 149 points

Quarterback, Kim, with 33 points

Team Football 200 total: 245

Which team scored more points?

Football 100

Football 100 wins!

// \\
//@ @\\
|| # ||
\\ <0 //

EXAMPLE 2

```
Scoring guidelines miniature golf fantasy league:
     20 points per hole in one
     5 extra points for each point under par that was not a hole in one
     50 points for hole in one on last whole
What is the first team's name?
Top Golfers
Calculating scores for Top Golfers
What is the first player's name?
Anna
Anna scored 240 points for Top Golfers
what is the second player's name
Damien
Damien scored 270 points for Top Golfers
what is the third player's name
Jake scored 90 points for Top Golfers
Team Top Golfers has 600 points in all
What is the second team's name?
Precise Putters
Calculating scores for Precise Putters
What is the first player's name?
Melinda
Melinda scored 55 points for Precise Putters
what is the second player's name
Nance
Nance scored 170 points for Precise Putters
what is the third player's name
Timone
Timone scored 305 points for Precise Putters
Team Precise Putters has 530 points in all
Which team won?
Top Golfers
Top Golfers Team logo:
                   | H |
                   | H |
                   IIII
                   III
                   |V|
     .----: <
  /===== /'.'.'.|
 |====== |.'.'.'.'.|
```

\==== /'.'.'.'/ '--=-='-:.:-'-'