Community College of Philadelphia

CSCI211 – Data Structures and Algorithms
ASSIGNMENT 8

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BST with Objects

For this project, research 10 professional sports teams and find the year the team was founded. Ensure that each team you chose has different years of their founding.

For each team, you'll instantiate a Team object that contains:

- A string field for the team's name
- An int field for the year the team was founded.
- You can make the fields public or use any number of setter/getters/constructors.

When you have a Team object ready, you'll insert it into a binary search tree that you have implemented. (Do not use tree-like data types built into the language). The year should be used for the BST's necessary comparisons. Do your best to add the objects/nodes in such an order that it will balance the tree as best as possible.

After your tree has been built, perform the following four traversals on your BST:

- An inorder traversal
- A postorder traversal
- A preorder traversal
- A breadth-first traversal

Print each team name (not the year) at the correct time in each traversal.

Submit all related source code files in the Assignment 8 submission link.

Grading

See Assignment Rubric in Canvas.