

## CSCI211 – Data Structures and Algorithms ASSIGNMENT 10

Instructor: Michael Hackett
Department: Computer Science
Email: <a href="mailto:mhackett@ccp.edu">mhackett@ccp.edu</a>

## **Heapsorting an Array of 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. (You can reuse the same data and Team class code from Assignments 8 and 9)

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 an array. The teams should be inserted in the array so that is has some random ordering. Once the array is filled with its ten objects, use a min-heap to sort the objects by the year. (Do not use a heap or priority queue-like data type built into the language). Then, refill the array with each object from the heap. Finally, print the team name from each object in the sorted array.

Submit all related source code files in the Assignment 10 submission link.

## **Grading**

See Assignment Rubric in Canvas.