## Spring 2025

## **Section B: Advanced Data Structures**

**2)** (10 pts) DSN (Heaps)

You are given an array, arr, of size integers. Write a <u>non-recursive</u> function that takes in this array and its size as input and returns 1 if the array represents a min-heap, and 0 otherwise. Recall that in an array implementation of a heap, index 0 isn't used and the root is stored at index 1. Since index 0 is unused, the function is checking if the array stores a valid heap in indexes 1 through size-1, inclusive, thus the number of nodes in the tree represented is size-1. You may assume size >= 2.

int isMinHeap(int arr[], int size) {