

**Due**

The due date is specified in the OAKS dropbox.

**OBJECTIVES**

- To implement a heapsort method using the Heap data type

**PROGRAM REQUIREMENTS**

Write and test a heapsort program. The program will generate random integers in an ArrayList of a length that the user specifies. Then it will sort the list then print both the unsorted list and the sorted list to the console using a comma as the delimiter.

**PROGRAM SPECIFICATION****Sample I/O:**

Enter the size of the list to generate: 10

Original list:

Sorted list:

Time to sort:

**Abstract Data Type:**

Heap

**REFERENCES**

None

**GUI:**

No GUI. Use the console for I/O.

**PROGRAM DOCUMENTATION**

Provide internal documentation only as required in the program documentation standard in OAKS.

Updates and clarifications to this assignment, if needed, will be done on Discussions.

**PROGRAM SUBMISSION**

Use the corresponding dropbox in OAKS using the same naming conventions as given in Program 1.