Write fully documented software to implement a heap sort. Show each intermediate heap while adding the following nodes to a heap (key, value):

44 Rams

22 Vikings

88 Lions

47 Dolphins

123 Patriots

44 Bengals

69 Packers

24 Broncos

13 Bears

42 Chargers

Show each intermediate heap while removing all the nodes from the heap. Do not use the Standard Template Library (STL) heap. Print the sorted list including the key.

Use the comparator where the minimum value is always at the root.

Output the result of the heap sort.

Due October 9th