

Review: HEAPS

First Name

Last Name

1. What is the efficiency of an algorithm that builds a heap from an array? Explain.

2. Given a heap in an array, draw the heap in its logical form, then show the resulting heap after inserting 44:

50 40 45 35 30 42 41 20

3. Show the resulting heap after calling the delete algorithm one time:

50 40 45 35 30 42 41 20

4. Create a priority queue using the following data. The first number is the priority and the letter is the data.

2-A, 1-B, 2-C, 1-D, 2-E