1. Insert the following keys to an empty heap: 5, 3, 17, 10, 84, 19, 6, 22, 9. Draw the resulting heap after each insertion!

2. Execute heap-del-max three times to the heap resulting from previous question.. Draw the resulting heap after each deletion!

3. Apply heap sort to array which contains numbers 5, 3, 17, 10, 84, 19, 6, 22, 9. Describe what happens to the heap during the execution of the algorithm.