

Quiz2

Full name:

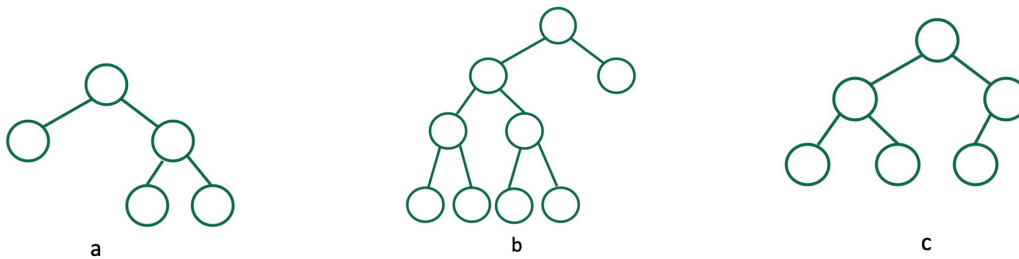
CSU ID:

Undergraduate/graduate:

Question 1 (4 points) Quick sort (nondecreasing order). 51 is the pivot in the beginning, illustrate all steps until the pivot being swapped to the new position.

51	95	66	72	42	38	39	41	15
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Question 2 (3 points) Select all complete and incomplete trees



Complete:

Incomplete:

Question 3 (4 points) heap sort in nonincreasing order. Given the following unsorted array, construct a maxHeap in an incremental way. Please illustrate all intermediate steps of the **maxHeap** with its corresponding array representation.

10	20	15	30	40
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