

Quiz 4

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Duration: 3h

Sorting

Implement sorting classes, which have private array of integers, and the following methods:
methods:

- a) constructor – takes size, initialized array, generates random numbers for the array
- b) constructor – takes unsorted array, copies the values of the passed array into its array.
- c) sort – sorts the array
- d) toString – returns the array in form of string

Note, that your sort method may require another private methods, such as sort wrapper, swap, partition or merge.

Write short test for each of your implementation.

1 (20 points). Implement class 'RadixSort'

2 (20 points). Implement class 'MergeSort'

3 (20 points). Implement class 'QuickSort'

4 (15 points). Implement class 'SelectionSort'

5 (15 points). Implement class 'InsertionSort'

6 (10 points). Implement class 'BubbleSort'