

PL UID:

Question 1: rt02

Question 1.1: run

Expected: {'key': 'c', 'html': '\$\\Theta(n)\$'}

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Expected: {'key': 'e', 'html': '\$\\Theta(n^2)\$'}

Question 1: heap_shorts_array_implementation_mc

Question 1.1: heap_array

Using the heap to sort the array is asymptotically as efficient as using mergeSort.

The heap order property may be violated by swapping the contents of two adjacent locations in arr so that the first is now smaller than the second.

Question 2: heap_shorts_build_heap

Question 2.1: arr

[5, 13, 46, 32, 52, 88, 85, 37, 61, 72]

Question 3: heap_shorts_operations

Question 3.1: heap_manipulation_insert

Expected: [{key: 'c', 'html': '21'}, {key: 'e', 'html': '53'}, {key: 'g', 'html': '59'}]

Question 3.2: heap_manipulation_remove

Expected: [{key: 'a', 'html': '16'}, {key: 'b', 'html': '20'}, {key: 'd', 'html': '23'}, {key: 'g', 'html': '59'}]

Question 1: disjt_unions

Question 1.1: height

Expected: 2

Question 1.2: unions

Expected: 12

Question 1.3: uptreenum

Expected: 38186

Question 1: edge_bds

Question 1.1: bfs



Expected: 1351

Question 1.2: glb

Expected: 78

Question 1.3: lub

Expected: 3004

Question 1.4: complete

Expected: {'key': 'a', 'html': 'Yes'}

Question 3: unique_disc

Question 3.1: bfs_dfs

[[{'key': 'a', 'html': '\$G\$ is acyclic.'}, {'key': 'b', 'html': '\$G\$ is a tree.'}]]

Question 4: v3_Graphs_running-time

Question 4.1: answer

Expected: {'key': 'e', 'html': '\$O(1)\$'}

Question 5: v3_Graphs_traversal

Question 5.1: answer

Expected: {'key': 'c', 'html': 'back'}
