# GIT Department of Computer Engineering

**CSE 222/505 - Spring 2020** 

Homework #6 Part 2 Report

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## **TEST CASES**

TEST ID	Scenario	Test Data	Expected Results	Actual Results	Pass/ Fail
TEST01	MergeSortLinkedList()	Unsorted array	Successfully Sorted	As Expected	Pass
TEST02	QuickSortLinkedList()	Unsorted array	Successfully Sorted	As Expected	Pass
TEST03	MergeSortLinkedList()	sorted array	Successfully Sorted	As Expected	Pass
TEST04	QuickSortLinkedList()	sorted array	Successfully Sorted	As Expected	Pass

### **RUNNING AND RESULTS**

#### TEST01

Before use MergeSortLinkedList on arr2: 10, 9, 8, 7, 6, 5, 4, 3, 2, 1,

After use MergeSortLinkedList on arr2: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,

#### TEST02

Before use QuickSortLinkedList on arr3: 10, 9, 8, 7, 6, 5, 4, 3, 2, 1,

After use QuickSortLinkedList on arr3: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,

#### TEST03

Before use MergeSortLinkedList on arr1: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,

After use MergeSortLinkedList on arr1: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,

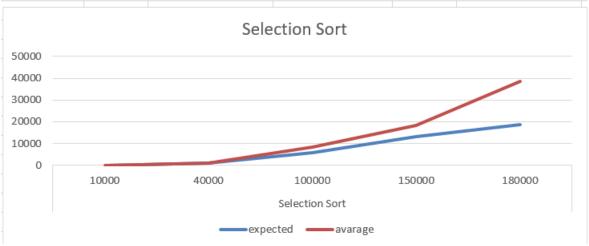
#### TEST04

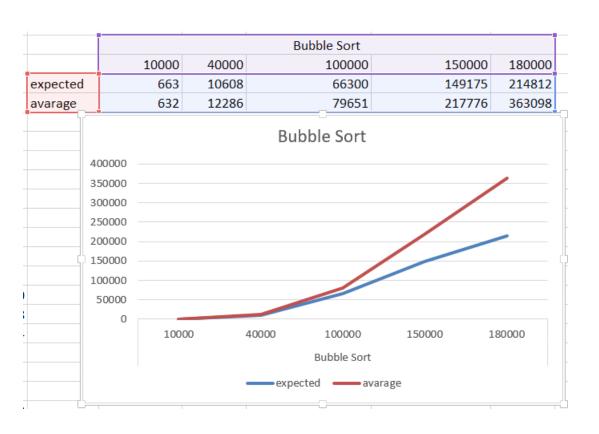
Before use QuickSortLinkedList on arr1: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,

After use QuickSortLinkedList on arr1: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,

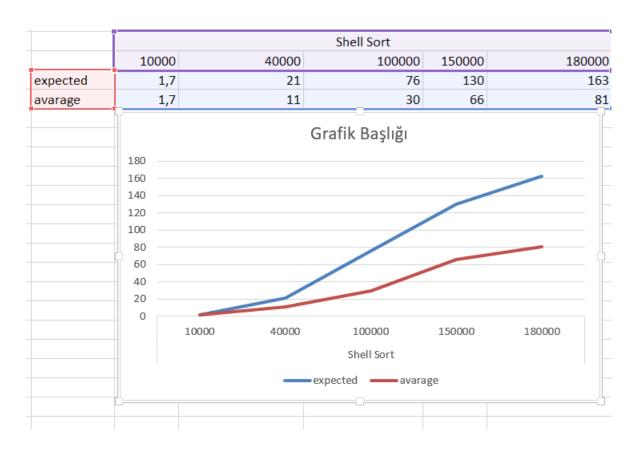
## **Graphs**

	Selection Sort				
	10000	40000	100000	150000	180000
expected	58	928	5800	13050	18792
avarage	59	1198	8333	18233	38584

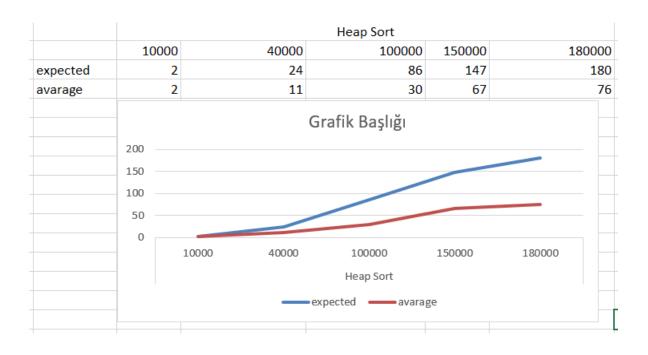


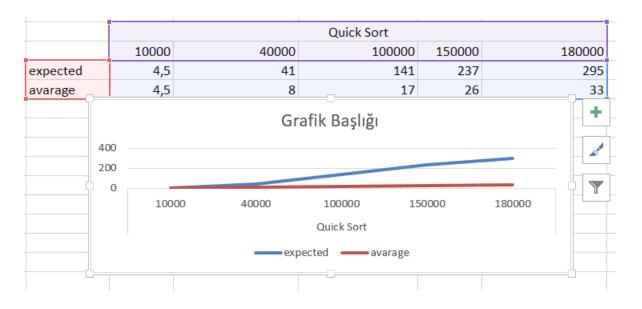


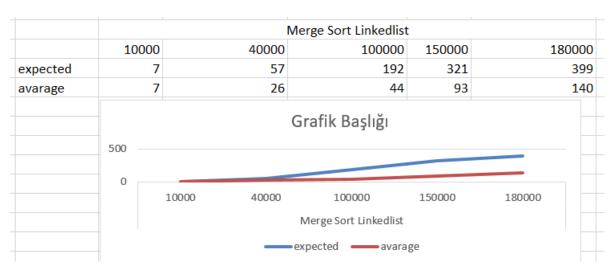
	Insertion Sort							
	10000	40000	100000	150000	180000			
expected	72	1152	7200	16200	23328			
avarage	72	1383	13347	47600	55674			
		I	nsertion Sort					
	60000							
	50000							
	40000							
	30000							
	20000 —							
	10000							
	0	40000 40000	4,0000	450000	40000			
	_	10000 40000	100000	150000	180000			
	_		Insertion Sort					
		_	expected ——avarag	e				



		Merge Sort						
	10000	4000	100000	150000	18000			
expected	4,5		141	237	29			
avarage	4,5	1	.3 27	50	6			
	400	Grafik Başlığı						
	200 100 0	10000 4000	00 100000	150000	180000			
			Merge Sort					
		expected avarage						







	Quick Sort Linkedlist					
	10000	40000	100000	150000	180000	
expected	180	1565	10800	25590	37580	
avarage	90	1466	8437	22443	32665	

