

2) (10 pts) ALG (Sorting)

(a) (5 pts) Show the contents of the following array after each iteration of Bubble Sort. The result after both the first and last iteration have been included for convenience. (Note: due to the nature of this question, relatively little partial credit will be awarded for incorrect answers.)

index	0	1	2	3	4	5	6	7
Initial	12	27	6	1	33	19	4	15
1 st iter	12	6	1	27	19	4	15	33
2 nd iter								
3 rd iter								
4 th iter								
5 th iter								
6 th iter								
7 th iter	1	4	6	12	15	19	27	33

(b) (5 pts) The array shown below has been partitioned exactly once (first function call in a Quick Sort of an array.) Which element was the partition element? Why?

index	0	1	2	3	4	5	6	7
Initial	16	19	13	12	9	27	49	33

Partition Element Index: _____

Partition Element Value: _____

Reason it was the Partition Element:
