

Name: Julia NelsonDate: 9/26/19Pledge: "I pledge my honor that I have abided by the Stevens Honor System" J. Nelson

For each algorithm, show the array after each iteration of the main (outer) loop. Since different implementations these algorithms do exist, be sure to use the code supplied in Canvas under "Elementary Sorting Algorithms". Do not show unnecessary steps, and do not simply stop early if the array is sorted. Trace through these algorithms verbatim. [You may not need all the lines given.]

Bubble Sort

Selection Sort

len = 6

0	1	2	3	4	5
78	15	23	2	97	85

0	1	2	3	4	5
78	15	23	2	97	85

After Loop:
len = 5

0	1	2	3	4	5
15	23	2	78	85	97

0	1	2	3	4	5
2	15	23	78	97	85

len = 2

0	1	2	3	4	5
15	2	23	78	85	97

0	1	2	3	4	5
2	15	23	78	97	85

len = 1

0	1	2	3	4	5
2	15	23	78	85	97

0	1	2	3	4	5
2	15	23	78	97	85

len = 0

0	1	2	3	4	5
2	15	23	78	85	97

0	1	2	3	4	5
2	15	23	78	97	85

Stop

0	1	2	3	4	5

0	1	2	3	4	5
2	15	23	78	85	97

0	1	2	3	4	5

0	1	2	3	4	5

[78, 15, 23, 2, 97, 85]

15 78

23 78

2 78

85 97

[15, 23, 2, 78, 85, 97]

2 23

[15, 2, 23, 78, 85, 97]

2 15

[2, 15, 23, 78, 85, 97]

Insertion Sort

0	1	2	3	4	5
78	15	23	2	97	85

0	1	2	3	4	5
15	78	23	2	97	85

0	1	2	3	4	5
15	23	78	2	97	85

0	1	2	3	4	5
2	15	23	78	97	85

0	1	2	3	4	5
2	15	23	78	97	85

0	1	2	3	4	5
2	15	23	78	85	97

0	1	2	3	4	5