

Selection Sort

Pass 1: 3 is the smallest element so it is already in the correct position

3	5	78	89	456	123	23	9	7	200	308	196	345	6
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Pass 2: 5 is the second smallest element so it is already in the correct position

3	5	78	89	456	123	23	9	7	200	308	196	345	6
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Pass 3

3	5	78	89	456	123	23	9	7	200	308	196	345	6
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Pass 4

3	5	6	89	456	123	23	9	7	200	308	196	345	78
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Pass 5

3	5	6	7	456	123	23	9	89	200	308	196	345	78
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Pass 6

3	5	6	7	9	123	23	456	89	200	308	196	345	78
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Pass 7

3	5	6	7	9	23	123	456	89	200	308	196	345	78
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Pass 8

3	5	6	7	9	23	78	456	89	200	308	196	345	123
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Legend

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 = Swap

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 = Sub-sorted array

Pass 9

3	5	6	7	9	23	78	89	456	200	308	196	345	123
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Pass 10

3	5	6	7	9	23	78	89	123	200	308	196	345	456
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Pass 11

3	5	6	7	9	23	78	89	123	196	308	200	345	456
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Pass 12

3	5	6	7	9	23	78	89	123	196	200	308	345	456
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Pass 13

3	5	6	7	9	23	78	89	123	196	200	308	345	456
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Pass 14

3	5	6	7	9	23	78	89	123	196	200	308	345	456
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Pass 15

3	5	6	7	9	23	78	89	123	196	200	308	345	456
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Final Result													
After all the passes, the array is sorted in ascending order:													
0	1	2	3	4	5	6	7	8	9	10	11	12	13
3	5	6	7	9	23	78	89	123	196	200	308	345	456