

Selection Sort

MCQs



Q1. Which of the following is true about selection sort?

- a) In each iteration we find the minimum element.
- b) In each iteration we find the index of the minimum element.
- c) We swap the index of the minimum element with the first element of the array.
- d) It takes $O(n^2)$ swaps.

Q2. What will the array look like after the first iteration of selection sort [2,3,1,6,4]?

- a) [1,2,3,6,4]
- b) [1,3,2,4,6]
- c) [1,3,2,6,4]
- d) [2,3,1,4,6]

Q3. The given array is arr = {6,7,8,5,4}. The number of iterations in bubble sort and selection sort respectively are?

- a) 2,4
- b) 4,2
- c) 4,5
- d) 5,4

Q4. Which of the following is true about selection sort?

- a) It is stable sort
- b) It is unstable sort
- c) It can be stable or unstable based on the order of elements.
- d) It is stable if the array is partially sorted.

Q5. Which of the following is an advantage of selection sort?

- a) It has a worst case complexity which is better than that of bubble sort.
- b) It takes $O(N)$ swaps while the other techniques take $O(N^2)$ swaps.
- c) The cost of swapping is an issue.
- d) All of these.

ANSWERS:

1. b) In each iteration we find the index of the minimum element.
2. c) [1,3,2,6,4]
3. d) 5,4
4. b) It is unstable sort
5. b) It takes $O(N)$ swaps while the other techniques take $O(N^2)$ swaps.