

MCOs

Suppose we are sorting an array of eight integers using a some quadratic sorting algorithm. After four iterations of the algorithm's main loop, the array elements are ordered as shown here: 2 4 5 7 8 1 3 6 *

Insertion sort

Selection sort

either of a and b

none of the above

The running time of insertion sort is *

$O(n^2)$

$O(n)$

$O(\log n)$

$O(n \log n)$

Which of the following sorting procedure is the slowest ? *

Quick sort

Heap sort

Shell sort

Bubble sort

A sort which compares adjacent elements in a list and switches where necessary is *

insertion sort

heap sort

quick sort

bubble sort

The correct order of the efficiency of the following sorting algorithms according to their overall running time comparison is *

Insertion>selection>bubble

Insertion>bubble>selection

Selection>bubble>insertion

bubble>selection>insertion

A sort which iteratively passes through a list to exchange the first element with any element less than it and then repeats with a new first element is called *

insertion sort

selection sort

heap sort

quick sort

The number of swappings needed to sort the numbers 8, 22, 7, 9, 31, 19, 5, 13 in ascending order, using bubble sort is *

10
9
13
14

The way a card game player arranges his cards as he picks them one by one can be compared to *

Quick sort
Merge sort
Insertion sort
Bubble sort

Which among the following is the best when the list is already sorted *

Insertion sort
Bubble sort
Merge sort
Selection sort

As part of the maintenance work, you are entrusted with the work of rearranging the library books in a shelf in proper order, at the end of each day. The ideal choice will be *

Bubble sort
Insertion sort
Selection sort
Merge sort