

AQA Computer Science A Level

4.3.5 Sorting algorithms

Flashcards

This work by [PMT Education](https://www.pmt.education) is licensed under [CC BY-NC-ND 4.0](https://creativecommons.org/licenses/by-nc-nd/4.0/)



Which sorting algorithm is most time efficient: bubble sort or merge sort?



Which sorting algorithm is most time efficient: bubble sort or merge sort?

Merge sort



Which sorting algorithm is an example of a “divide and conquer” algorithm?



Which sorting algorithm is an example of a “divide and conquer” algorithm?

Merge sort



What is the time complexity of the bubble sort algorithm?



What is the time complexity of the bubble sort algorithm?

$O(n^2)$



What is the time complexity of the merge sort algorithm?



What is the time complexity of the merge sort algorithm?

$O(n \log n)$



Sort this array into ascending order using
the bubble sort algorithm

4 3 5 7 6



Sort the array into ascending order using the bubble sort algorithm

4	3	5	7	6	3	4	5	6	7
3	4	5	7	6	3	4	5	6	7
3	4	5	7	6	3	4	5	6	7
3	4	5	7	6	3	4	5	6	7
3	4	5	6	7	3	4	5	6	7



Sort this array into ascending order using
the merge sort algorithm

Tom Sue Jack Bill Ada



Sort the array into ascending order using the merge sort algorithm

