

Typical Coding Interview Questions

1. Discuss the differences between BubbleSort, QuickSort and MergeSort.

2. What sort of structure would you use to create a dictionary - a structure that allows you to look up words to get their meanings?

3. Order the following functions in order of their asymptotic performance:

$$2^n$$

$$n^{1000}$$

$$n!$$

$$n^n$$

4. Give an algorithm to insert a value into a sorted linked list.

5. Give an algorithm for reversing a linked list.

6. There is a standard `LinkedList` class in Java.
How could you determine if it is singly-linked or doubly-linked?

7. What are the differences between class variables, local variables, and static variables?

8. How would you eliminate a repeated element in an array? (i.e., $A[i] == A[i+1]$)

9. How would you eliminate a duplicate element in an array? (i.e., $A[i] == A[j]$)