

Quick Questions

1. Mergesort guarantees to sort an array in _____ time, regardless of the input:
 - A. Linear time
 - B. Quadratic time
 - C. Linearithmic time
 - D. **Logarithmic time**

2. The main disadvantage of MergeSort is:
 - A. It is difficult to implement
 - B. **It uses extra space in proportion to the size of the input**
 - C. It is an unstable sort
 - D. None of the above

3. Merge sort makes use of which common algorithm strategy?
 - A. Dynamic Programming
 - B. Branch-and-bound
 - C. Greedy approach
 - D. **Divide and conquer**

4. Which sorting algorithm will take the least time when all elements of the input array are identical?
 - A. Insertion Sort
 - B. MergeSort
 - C. Selection Sort
 - D. **Bogo Sort**

5. Which sorting algorithm should you use when the order of input is not known?
 - A. **Mergesort**
 - B. Insertion sort
 - C. Selection sort
 - D. Shell sort