Practical 6

1. Mergesort guarantees to sort an array in  \_\_\_\_\_\_\_ time, regardless of the input:

1. Linear time
2. **Quadratic time**
3. Linearithmic time
4. Logarithmic time

. The main disadvantage of MergeSort is:

1. It is difficult to implement
2. **It uses extra space in proportion to the size of the input**
3. It is an unstable sort
4. None of the above

. Merge sort makes use of which common algorithm strategy?

1. Dynamic Programming
2. Branch-and-bound
3. Greedy approach
4. **Divide and conquer**

 Which sorting algorithm will take the least time when all elements of the input array are identical?

1. Insertion Sort
2. MergeSort
3. Selection Sort
4. **Bogo Sort**

Which sorting algorithm should you use when the order of input is not known?

1. **Mergesort**
2. Insertion sort
3. Selection sort
4. Shell sort