

UCS301 Data Structures Lab

Assignment 7

1. Write a program to implement following sorting techniques:

- a. Selection Sort
- b. Insertion Sort
- c. Bubble Sort
- d. Merge Sort
- e. Quick Sort

2. A slightly improved selection sort – We know that selection sort algorithm takes the minimum on every pass on the array, and place it at its correct position. The idea is to take also the maximum on every pass and place it at its correct position. So in every pass, we keep track of both maximum and minimum and array becomes sorted from both ends. Implement this logic.

Additional Questions

- 1. Counting Sort (<https://www.programiz.com/dsa/counting-sort>)
- 2. Radix Sort (<https://www.programiz.com/dsa/radix-sort>)