

ADA Assignment 3

Submission Date: 24/10/2020

Q.1 Explain Divide & Conquer (D&C) Technique in detail.

Q.2 Solve this Binary Search – Examples

Demonstrate binary search algorithm and find the element $x = 12$ in the following array. [3 / 4]

2, 5, 8, 12, 16, 23, 38, 56, 72, 91

Explain binary search algorithm and find the element $x = 31$ in the following array. [7]

10, 15, 18, 26, 27, 31, 38, 45, 59

Q.3 Sort given numbers into descending order using merge sort.

38, 27, 43, 3, 9, 82, 10, 67, 71, 54, 97

Q.4 Sort the following array in ascending order using quick sort algorithm.

- 3, 1, 4, 1, 5, 9, 2, 6, 5, 3, 5, 8, 9
- 9, 7, 5, 11, 12, 2, 14, 3, 10, 6