1\_ Recursive

This code uses the merge sort feature to merge and arrange the 2 arrays into a new array and search for the element k

A notebook with writing on it

Description automatically generated

2\_Non\_recursive

A paper with writing on it

Description automatically generated

Recursive is the best because time compixity of recursive is (O(nlogn)) and time complixity of non\_recursive is O(n^2)

3\_non\_recursive

A piece of paper with writing on it

Description automatically generated

Time complixty is O(n)

4\_ recursive

A close up of a paper

Description automatically generated

Worst case Time complixty= o(x+Y)

Best case time complixty= 0(1)

Recursive is the best