QUICK SORT

QuickSort is a sorting algorithm based on the Divide and conquer algorithm that picks an element as pivot and partitions the given array around the picked pivot by placing the pivot in the sorted array.

Working -

Choose a pivot: Select a pivot element from the array. The pivot is used to partition the array into sub arrays.

Partitioning: Reamange the array elements such that all elements less than the pivot are on lest and all the elements greater than pivot are on right. The pivot itself is now in its sorted position.

Recursion: Apply the Quick Sort algorithm recursively to the subarray on the ierr and right of the pivot until the entire array is sorted.

1.17 min = [1-2] 110

TIME DO SHE

```
Example -
         public class QuickSon-1
                     public static void main (string Dargs)?
          int Darr= 45, 4, 3, 2, 17;
                                 Sort (am 0, am length-1);
        10W high
                  Static void sort Cint Onums, int high, int low) 1
         How of heif (how) = high) ment man
                                       return.
                             10+ s - 10w;
                             inte-high;
        int m = (s+e)/2
                             int pivot = humscmj; ho
           While (six = e) 1
        while Chums (SJK pivot)
war and the best of a second of sette to the and but the man and a grant and a grant and the second of
         true bob botteries and at reside and a mornand off
                                   while (nums [e] > pivot)1
                                                 e--!
                                                             deside of the angle ban patterns.
         ip (sk=e) hours in the land in the
                                         int temp= nums [s];
     pums [s] - nums [e];
                                           nums [e] = temp; in in and in
                               Sort Chums, low, e);
                  19/19 sort (nums, s, high);
                              Active mile enteredie 1 Carolle 1 care entere
    the series of the feath addonors with a house of minister off
                                          Andronito y the observable and the many part of
               an amount of the form of the of the same o
```