Team: Niveditha Gopalkrishna, Shashank Chandrashekar

If in Fuzzy sort Partition where we have no overlaps we find it’s time complexity to be same as quick sort that is O(nlogn). If no overlaps are created then the 3rd line is O(n) and we will call two subarrays of size n/2 each.

T(n)=T(n/2)+O(n)

Using master method we get it as O(nlogn)

If in fuzzy sort every interval is in the middle region then the left and right sub arrays will be empty. As there is no recursion we will get the run time as O(n).

We will get the run-time as O(nlogn) when there is no overlap.

We will get run-time as O(n) if all intervals Overlap.