Name: Ameen Mohamed Fouad

Section: 2

CS Department

 $A => T(n) = O(n ^ log_2(7))$

B => Merge m sorted lists: O(n log m)

C => Huffman algorithm: O(n log n)

 $D \Rightarrow MST$ weight = n - 1 (if all edge weights are 1).

E => Find pair with minimum absolute sum: O(k log k)

F =>

• In-degree: O(|V| + |E|)

• Out-dearee: O(|V| + |E|).