	Name: Imadh Aj'az Banday
	UTA ID: 100 222 8309
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Johns I Twent A Down I small POED SISBOLIOINTU P NO- Which Q3) une can improve tre algorithm by inflementing min-heaf with oftenized privorities queues and libraries like head q. This allows to stere last - (8) is a (8) like head q and minimize memory and minimize memory overhead (Mathi-threading can Calvo be wired as one of the atternatures. 1 miller 6 -> Problem ?: (a) Time complexity: I array or is sorted is the first will O(N) .) for (Mupat) 0 (M) 0 00 CN) of for removing dipluter MOO. (His Combined: O(N) is sout talet If array (is awarted : O(N) to for ment to jetural ((N) begn) - for sorty

O(N) -> per remoning duplicater : Combined: O(N by N) (3) Appreach is already efficient of the array is sorted, it takes time conflictly of o(N).