

CSE221

MID

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Q1

Merge sort

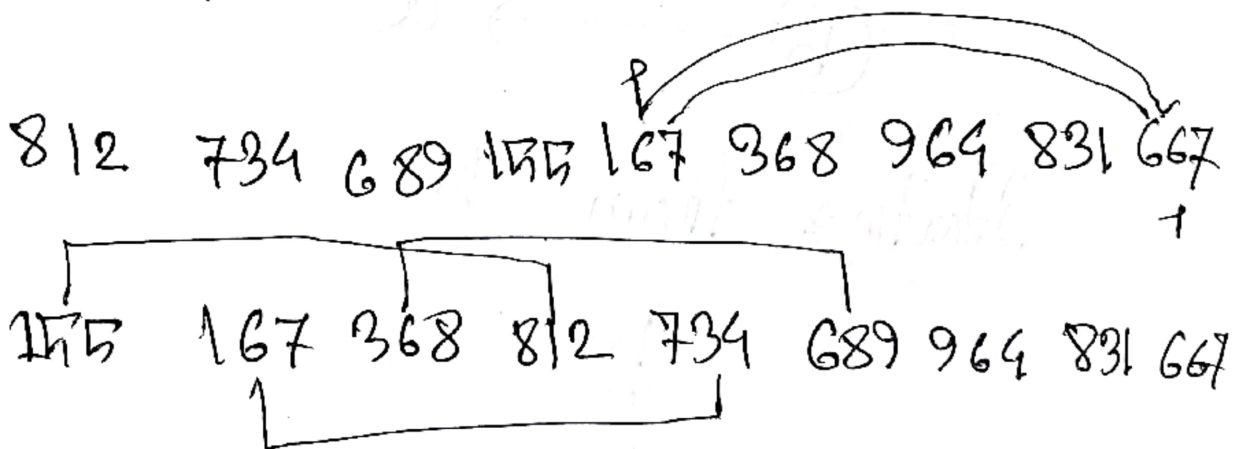
Q2

Worst case $\leq O(n \log n)$

Q3

mid is $\Rightarrow 667$

812 734 689 155 667 368 964 831 167



155	167	368	667	734	689	964	831	812
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Ans

Q45

false true false true

Q4

$O(n)$ because the bus could
be ~~a~~ to anywhere sorting does not
matter

Q5



Starting from b



Part A

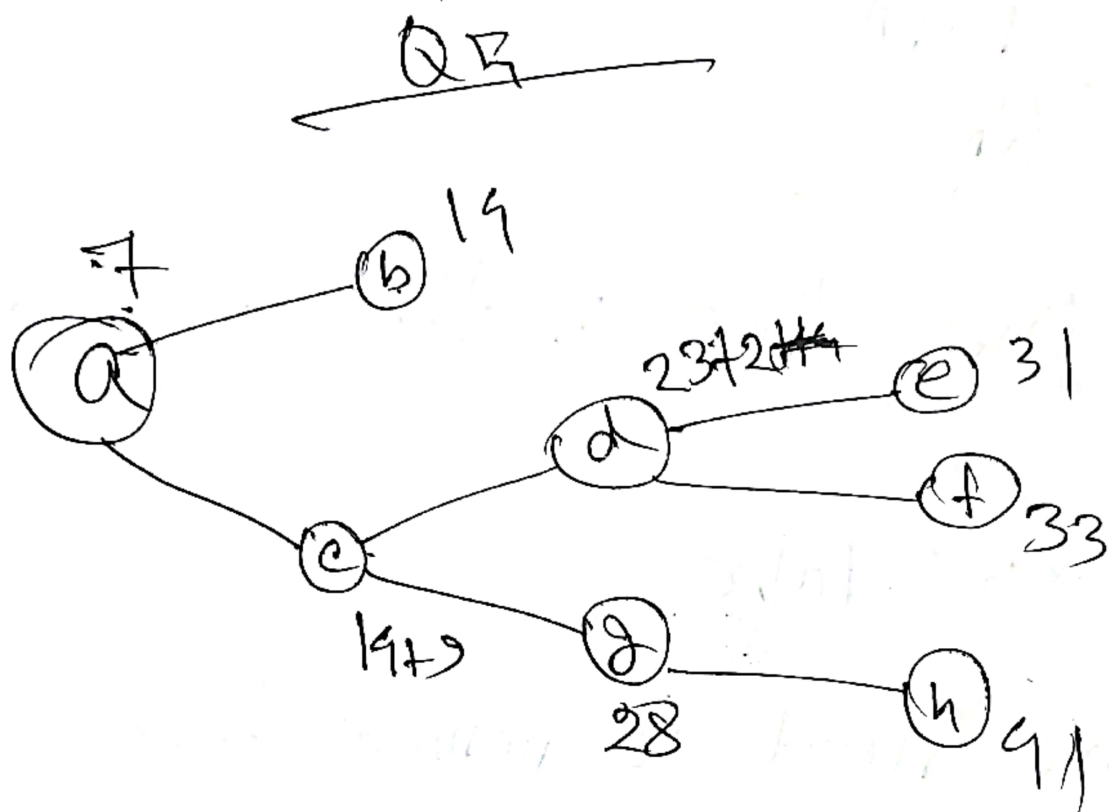
Q₂

One tree in the above dfs forest

Q₃ : False

Ex. We need to remove back edge
to remove cycle

Q₄ : True



Q6

$$\text{Min } a > b > c > g > h$$

$$= 7 + 7 + 9 + 3 + 8$$

$$= 34$$