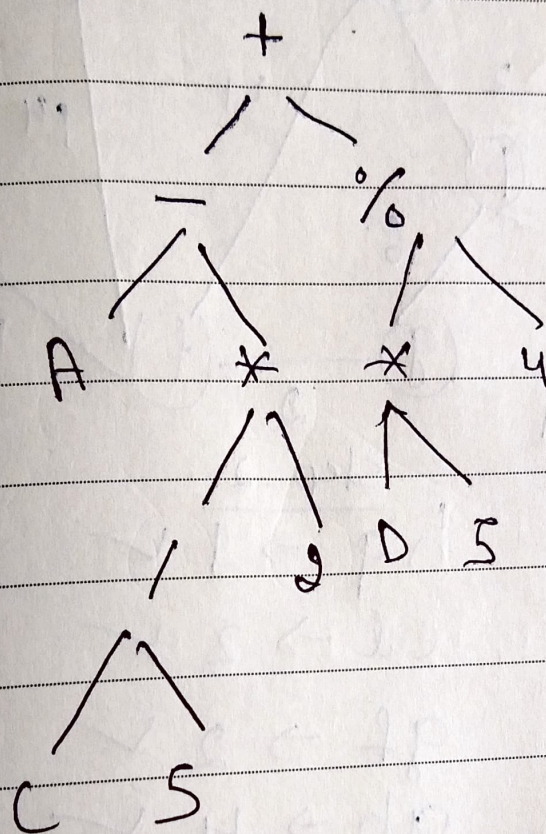


DS - A2

1) Traverse with Inorder, preorder & postorder



⇒ preorder → Ro, L, R

→ + - A * 1 C 5 2 % * D 5 4

Inorder → L Ro R

A - C / 5 * 2 + D * 5 % 4

postorder → LR Ro

AC 5 / 2 * D 5 * 4 % +

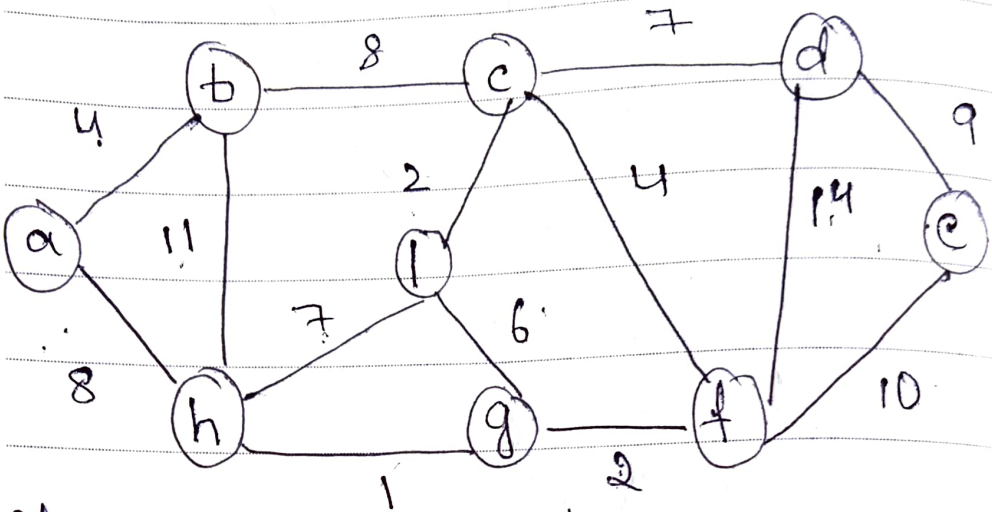


Memo No. _____

Date ____/____/____

Mo	Tu	We	Th	Fr	Sa	Su
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2) Kruskal's algorithm



Step - 1

$a b \rightarrow 4$

$b c \rightarrow 8$

$a h \rightarrow 8$

$b h \rightarrow 11$

$c d \rightarrow 7$

$c l \rightarrow 2$

$h l \rightarrow 7$

$l g \rightarrow 6$

$h g \rightarrow 1$

$c f \rightarrow 4$

$g f \rightarrow 2$

$d f \rightarrow 14$

$d e \rightarrow 9$

$f e \rightarrow 10$

Step - 2

$h g \rightarrow 1 \checkmark$

$c d \rightarrow 7 \checkmark$

$g f \rightarrow 2 \checkmark$

$a b \rightarrow 4 \checkmark$

$c f \rightarrow 4 \checkmark$

$l g \rightarrow 6 \times$

$c d \rightarrow 7 \checkmark$

$b c \rightarrow 8 \checkmark$

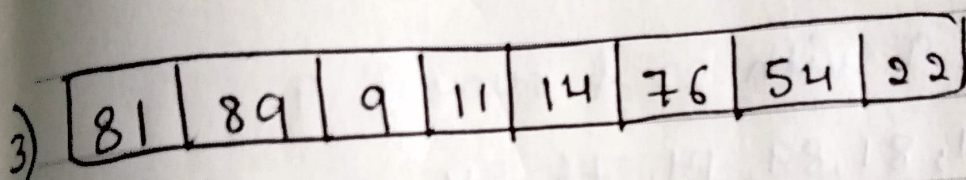
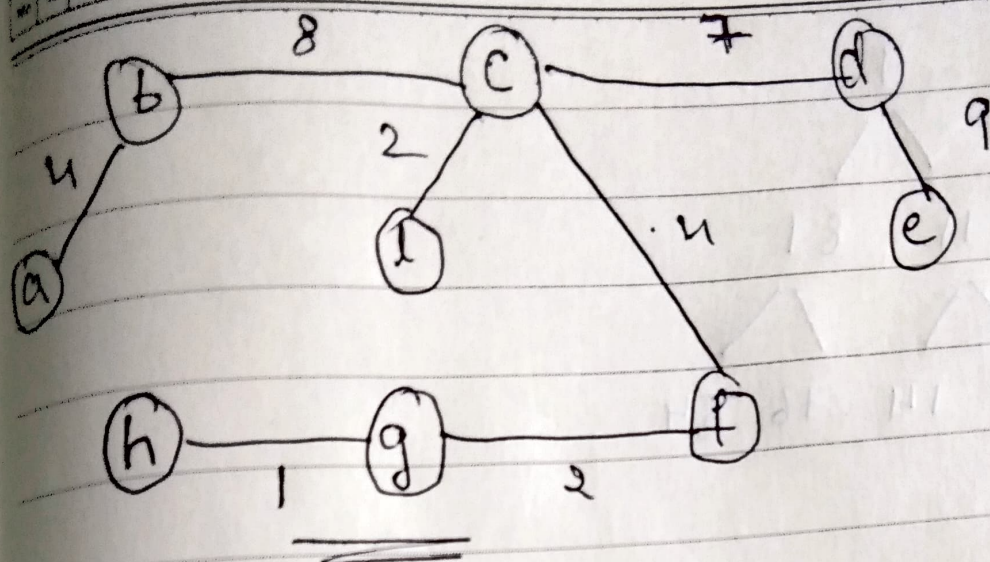
$a h \rightarrow 8 \times$

$d e \rightarrow 9 \checkmark$

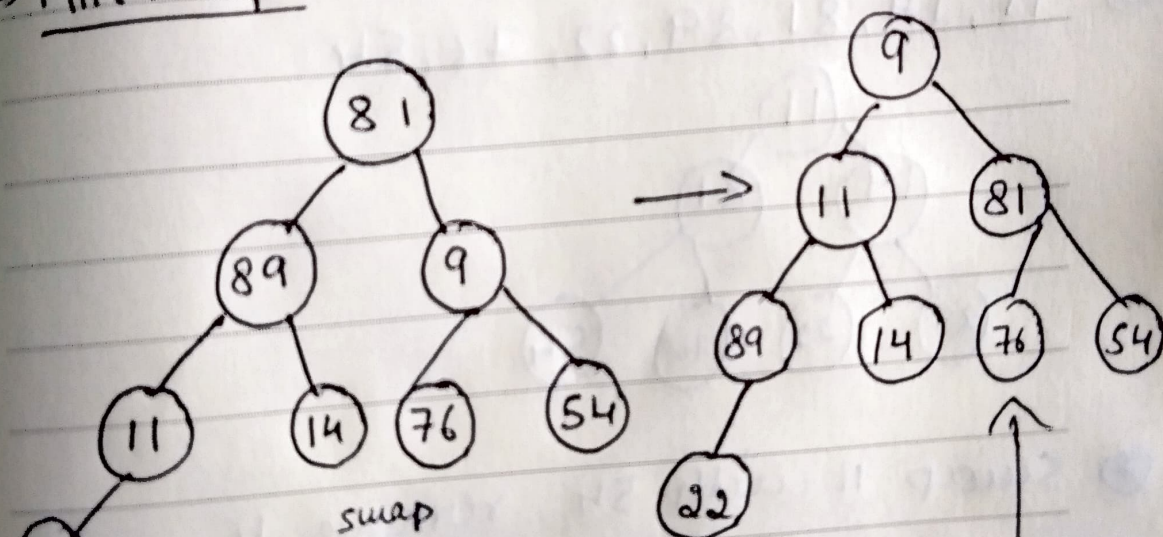
$f e \rightarrow 10 \times$

$b h \rightarrow 11 \times$

$d f \rightarrow 14 \times$



⇒ Min Heap



81, 89, 9, 11, 14, 76, 54, 22

81, 11, 9, 89, 14, 76, 54, 22

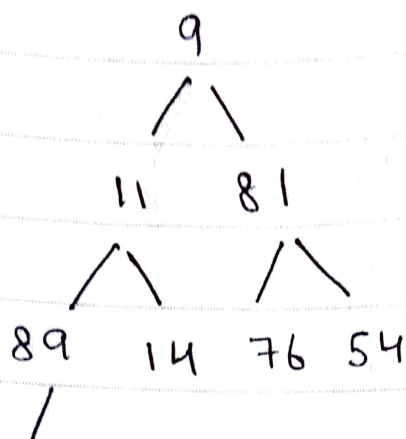
9, 11, 81, 89, 14, 76, 54, 22



Mo	Tu	We	Th	Fr	Sa	Su
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Memo No.

Date

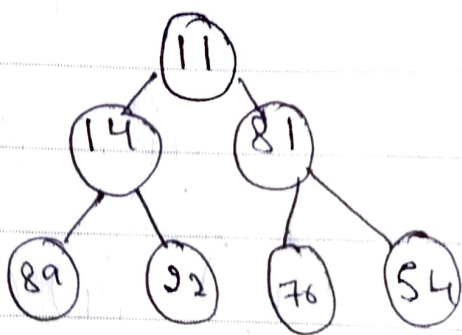


22

➔ swap 9 with 22 & remove 9

22, 11, 81, 89, 14, 76, 54

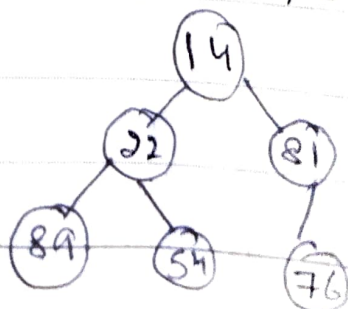
→ 11, 14, 81, 89, 22, 76, 54



➔ swap 11 with 54, remove 11

54, 14, 81, 89, 22, 76

→ 14, 22, 81, 89, 54, 76





Mo	Tu	We	Th	Fr	Sa	Su
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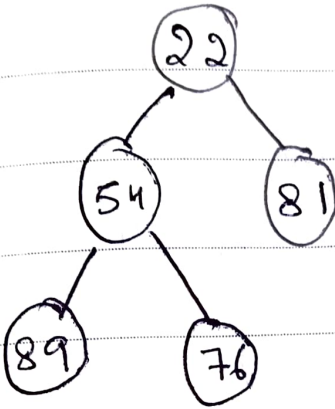
Memo No. _____

Date / /

② → Swap 14 with 76, remove 14

76, 22, 81, 89, 54

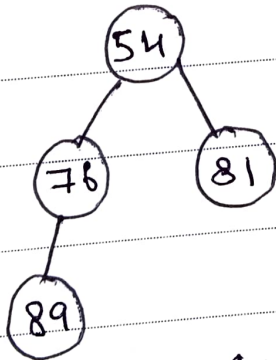
22, 54, 81, 89, 76



③ → Swap 22 with 76, remove 22

76, 54, 81, 89

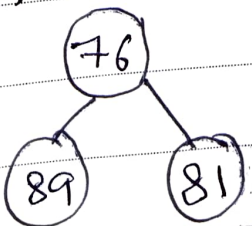
54, 76, 81, 89



④ → Swap 54 with 89, remove 54

89, 76, 81

76, 89, 81





Mo	Tu	We	Th	Fr	Sa	Su
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Memo No. / /

Date / /

② → Swap 76 with 81 remove 76

81, 89

③ swap 81 with 89
remove 89

81

89

so sorted array is

9, 11, 14, 22, 54, 76, 81, 89