Rishikesh R R

A776647

Day - 8

1.)

In order ⇒ A - C / 5 * 2 + D * 5 / . 4

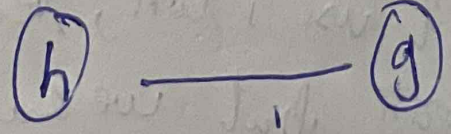
Pre order ⇒ + - A * / C 5 2 / . * D 5 4

Post Order ⇒ A C 5 / 2 * - D 5 * 4 / . +

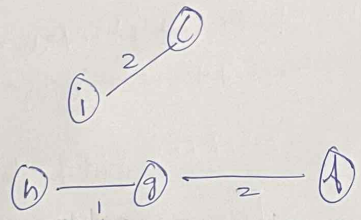
2). Kruskal's Algorithm.

No. of. edges = No of vertices - 1

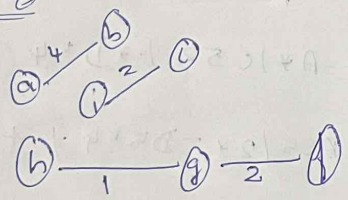
Step 1:



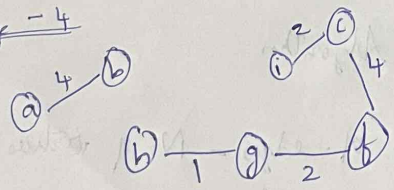
step - 2




step - 3



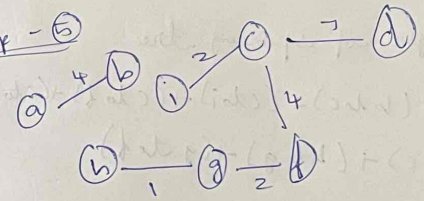

step - 4




*) In next step we can't use i to g, because it will form a cyclic form.

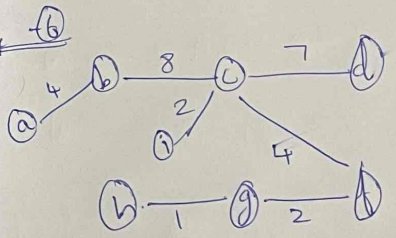
*) In next step we can't use i to h, because it will form a cyclic form but we can use c to d.

step - 5

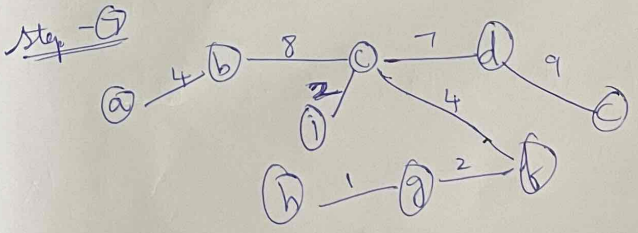



In next step we can use either b to c or a to h. But we should not use both because it will form cyclic form.

step - 6




step - 7




This is a final output.

No of edges = Vertices - 1 and All nodes are visited and linked.

Total weight of spanning tree :-

$= (a \text{ to } b) + (b \text{ to } c) + (c \text{ to } i) + (c \text{ to } f) + (c \text{ to } d)$

$+ (d \text{ to } e) + (h \text{ to } g) + (g \text{ to } f)$

$= 4 + 8 + 2 + 4 + 7 + 9 + 1 + 2$

**Total weight = 37**