Day - 8

Abishek Dharmaraj

1.)

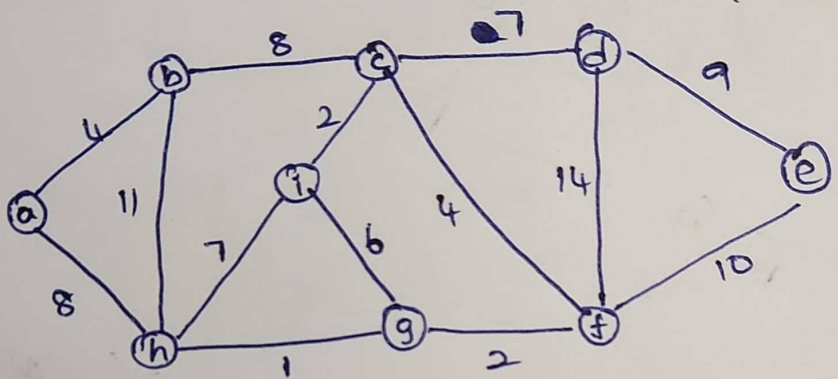
Inorder - A - C / 5 * 2 + D * 5 % 4

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

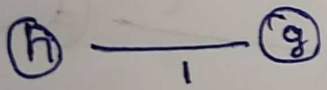
PostOrder - A C 5 / 2 * - D 5 * 4 % +

2.) kruskal's Algorithm:

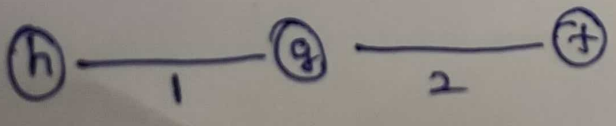
No of edges (MST) = No of vertices − 1



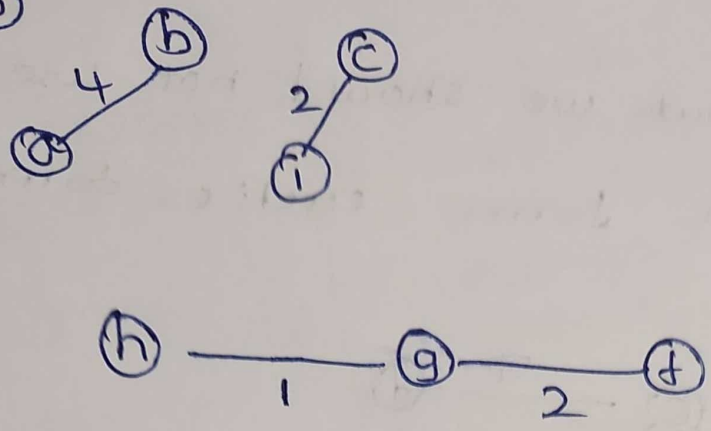
Step - ①



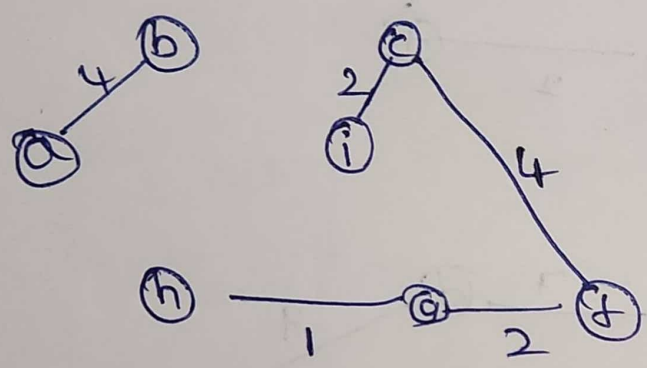
Step - ②



Step – (3)



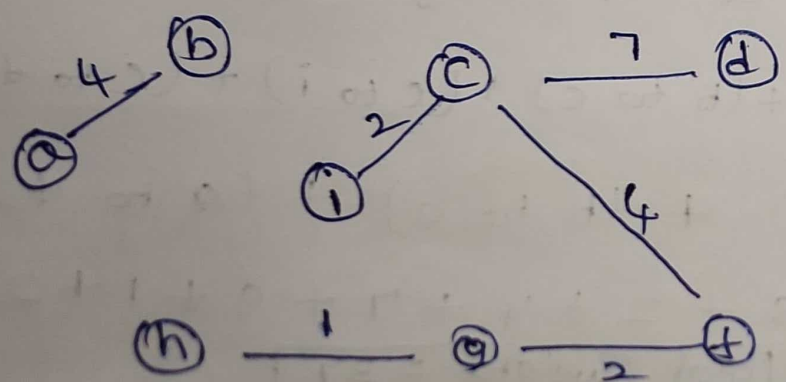
Step – (4)



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

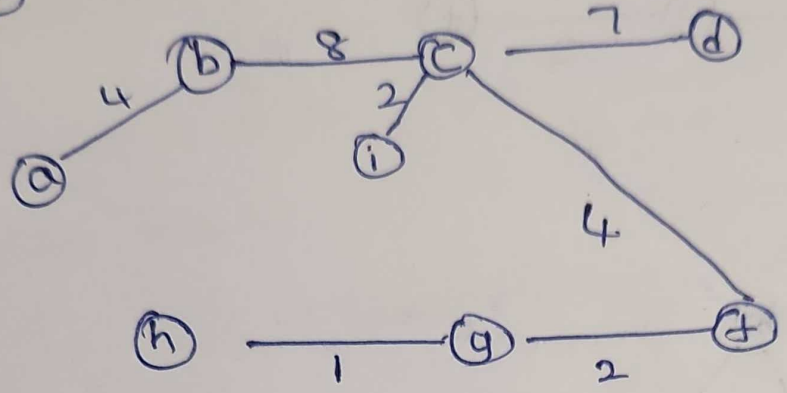
In next step we can't use i to h, because it will form a cyclic form but we can use c to d.

Step – (5)

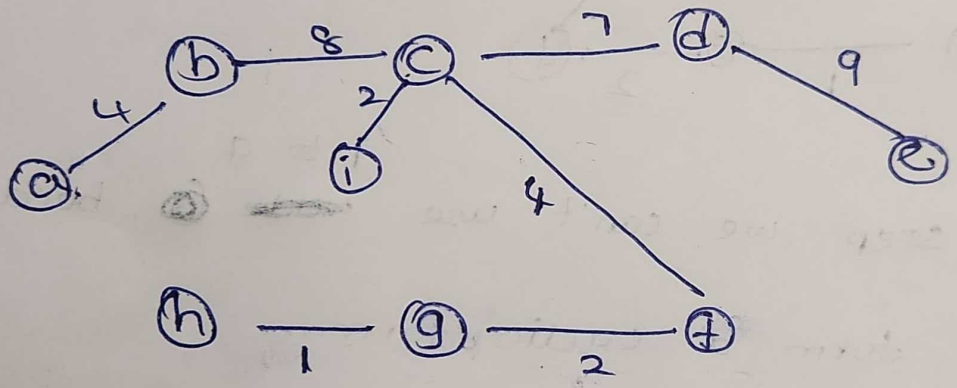


In next step we can use either b to c or a to h. but we should not use both because it will form cyclic form.

Step- (6)



Step - (7)



This is a final output. where no of edges = vertices - 1 and All nodes are visited and linked.

Total weight of spanning tree

= (a to b) + (b to c) + (c to i) + (c to f) + (c to d) + (d to e) + (h to g) + (g to f)

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

Total weight = 37