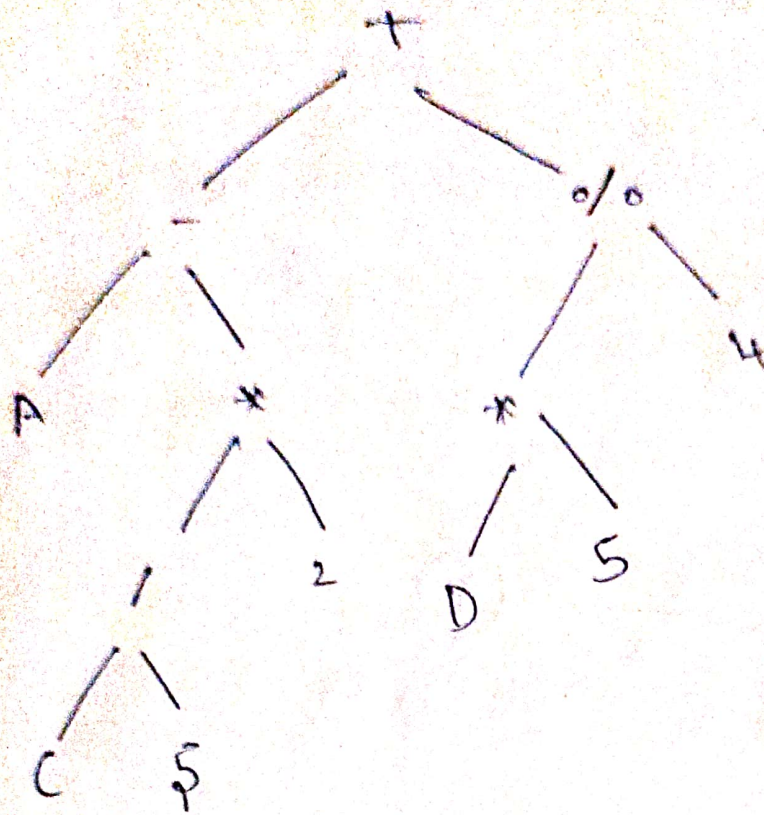


S. VISHNUPRIYAN

Day. 8

2777586

1)

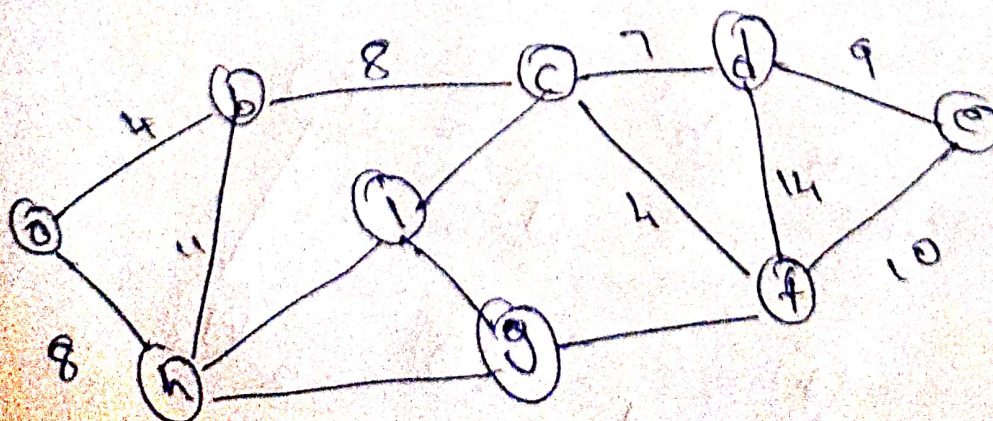


INORDER: A - C 5 * 2 + D * 5 % 4

PREORDER: + - A * 1 C 5 2 % 4 * D 5 4

POSTORDER: A C 5 1 2 * - D 5 * 4 % +

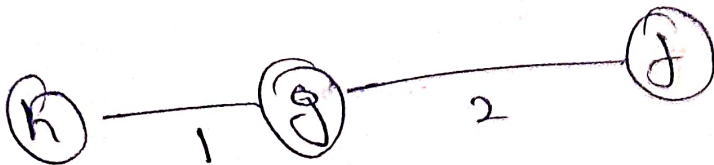
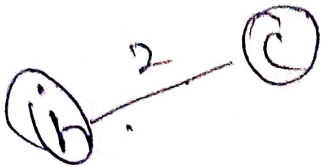
2) KRUSKAL'S ALGORITHM



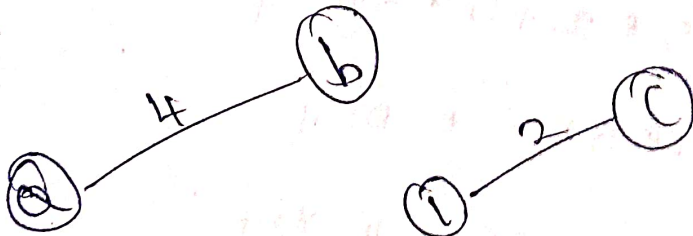
Step - 1



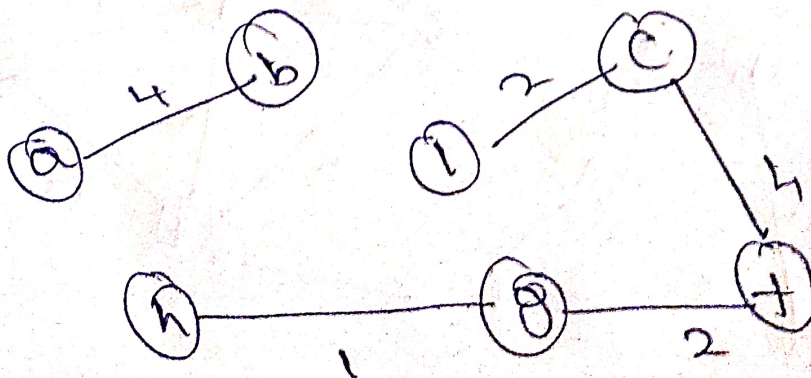
Step - 2



Step - 3



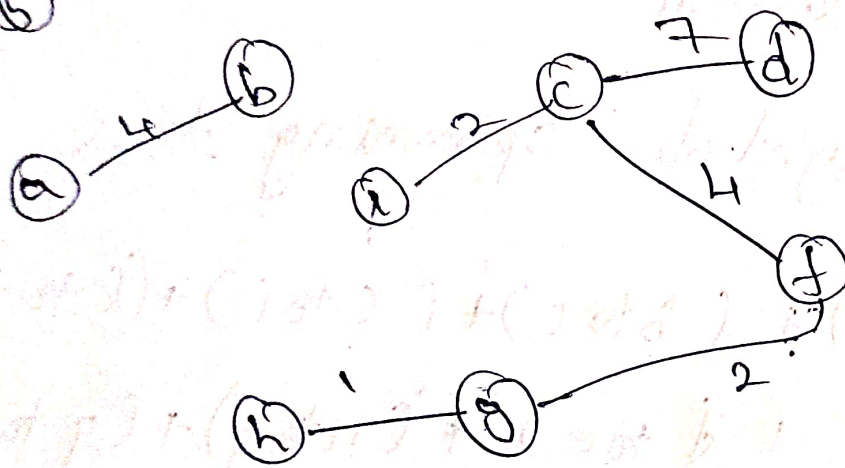
Step - 4



* In the following step connect from i to g will form a cyclic structure so it need to be skipped.

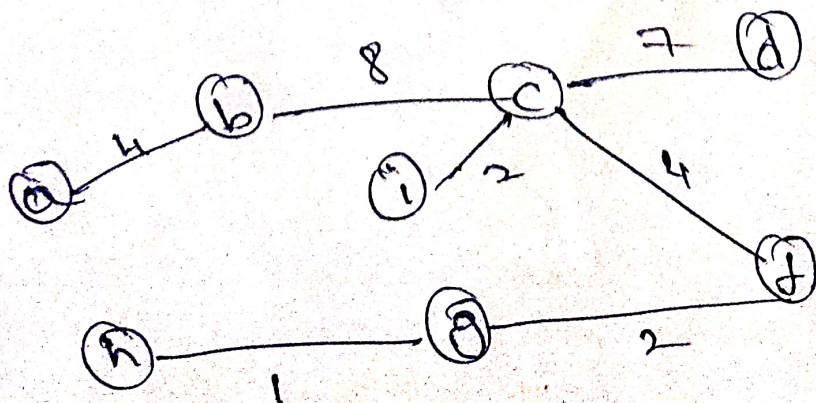
* In the following step we can't use i to h, because it will form a cyclic form but we can use c to d.

Step-5

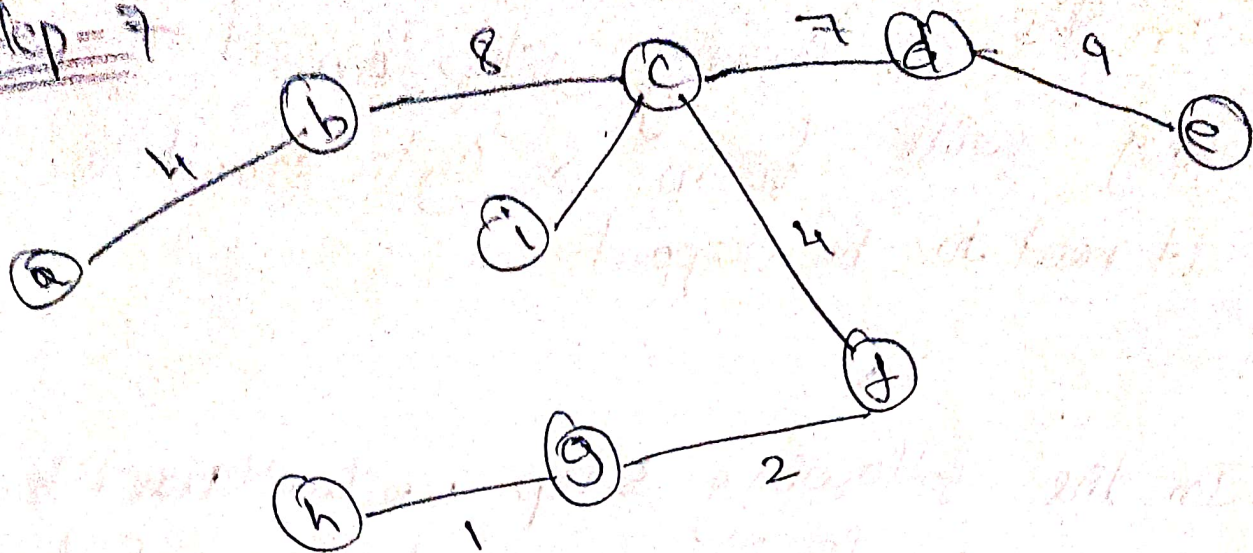


* In the next step we can use either b to c or a to h but we should not use both because it will form cyclic structure

Step-6



Step - 9



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

total weight of spanning tree

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

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

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

$$\text{total weight} = 37$$