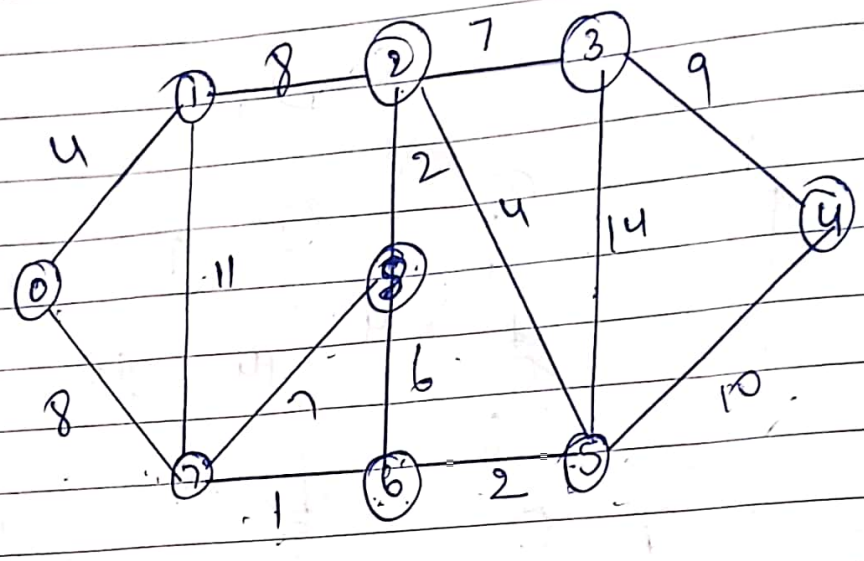
Kruskal's Algorithm Assignment



First Sort the edges in increasing order

7 - 6 => 1
6 - 5 => 2
8 - 2 => 2
0 - 1 => 4
5 - 2 => 4
6 - 8 => 6
2 - 3 => 7
7 - 8 => 7
1 - 2 => 8
0 - 7 => 8
3 - 4 => 9
5 - 4 => 10
1 - 7 => 11
5 - 3 => 14

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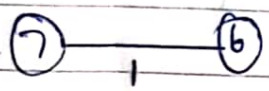
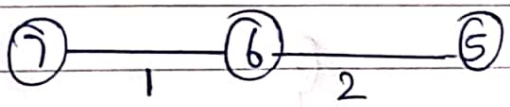
minimum weighted

Now select the edges one by one in the way that we should not get any loop.

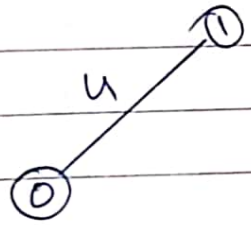
step 1 :-

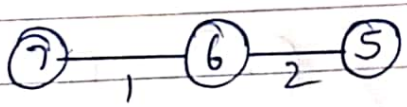


step 2 :-

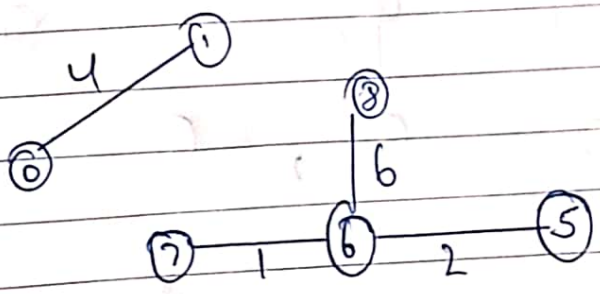


Step 3 :-





step 4 :-



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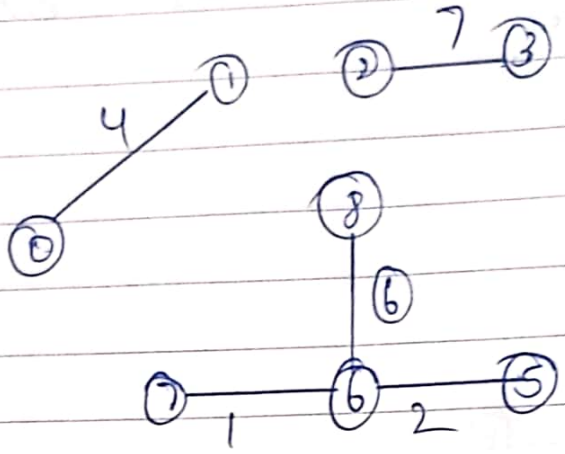
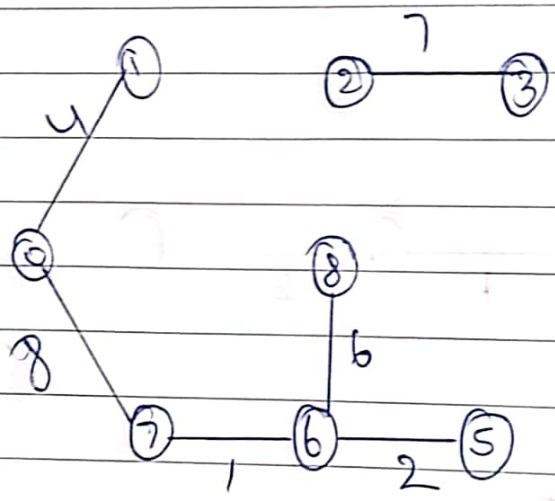
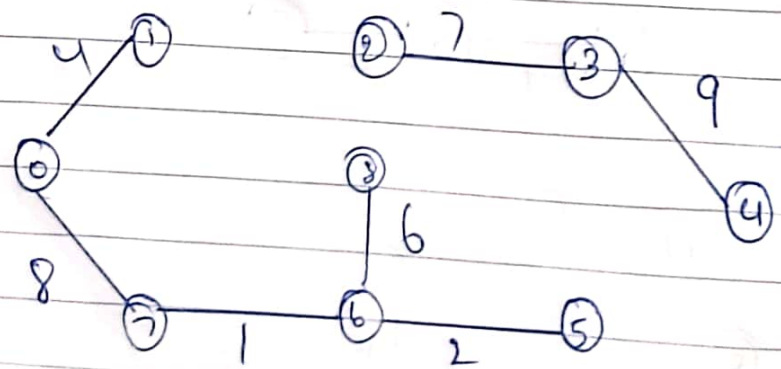
step 5:-



step 6:-



step 7:-



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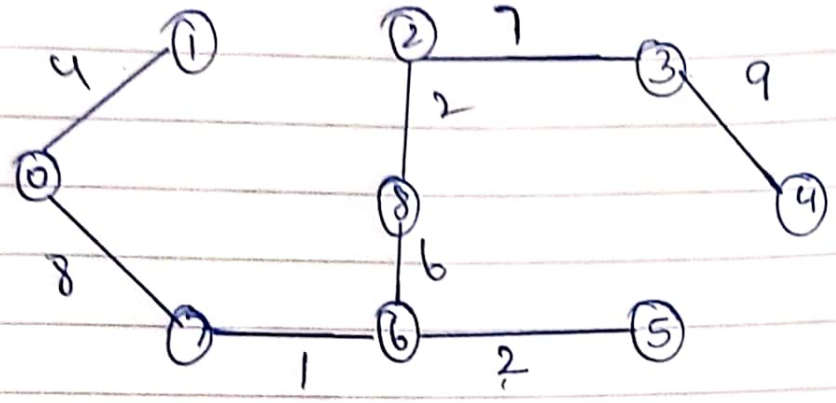
step 6:-



∴ The cost of minimum spanning tree is

$1+2+2+4+6+7+8+9 := 39$.

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