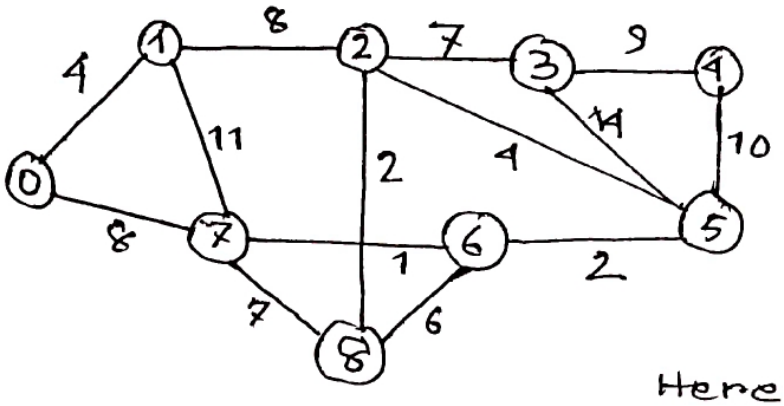
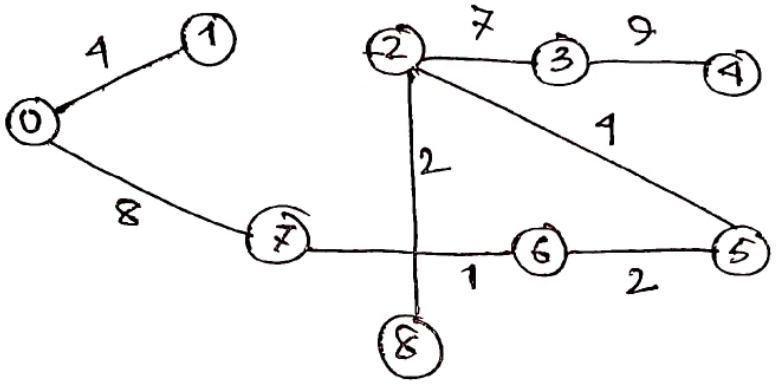


Here

$V = 9$

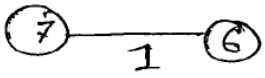
$|V| - 1 = 8$ edges

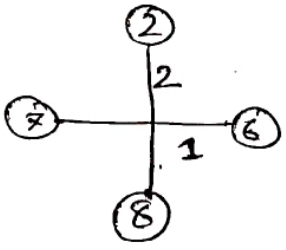
kruskals MST:

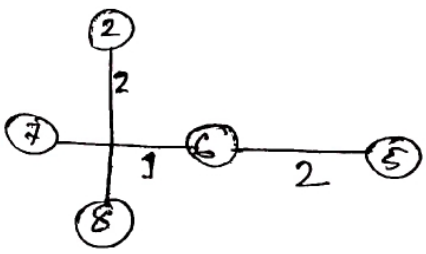


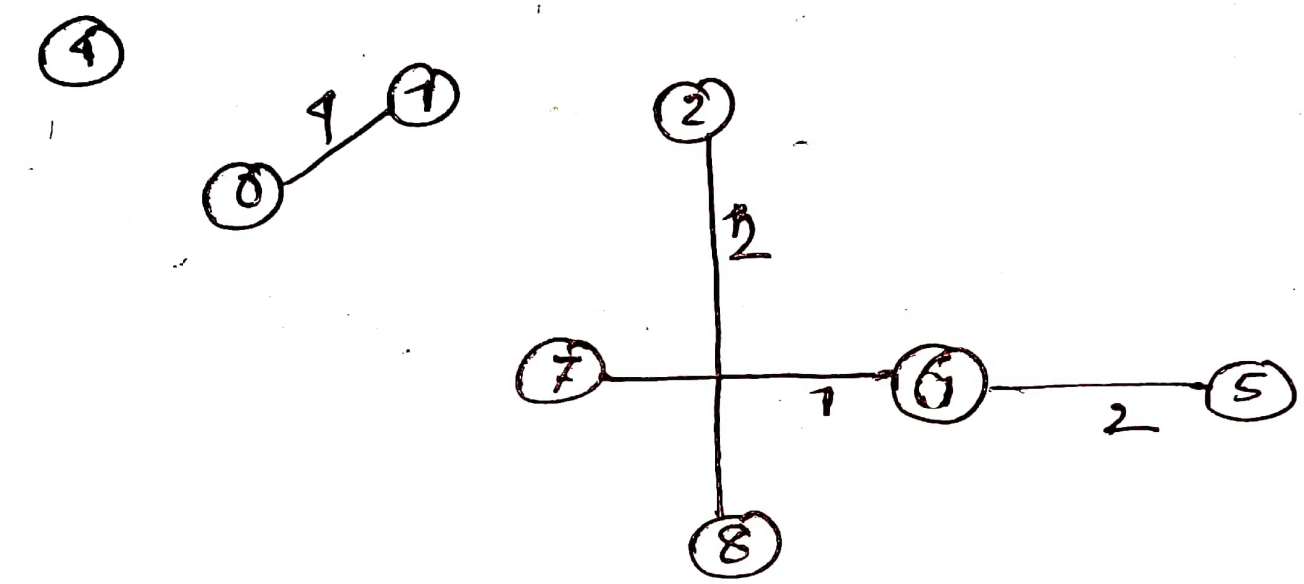
simulation:

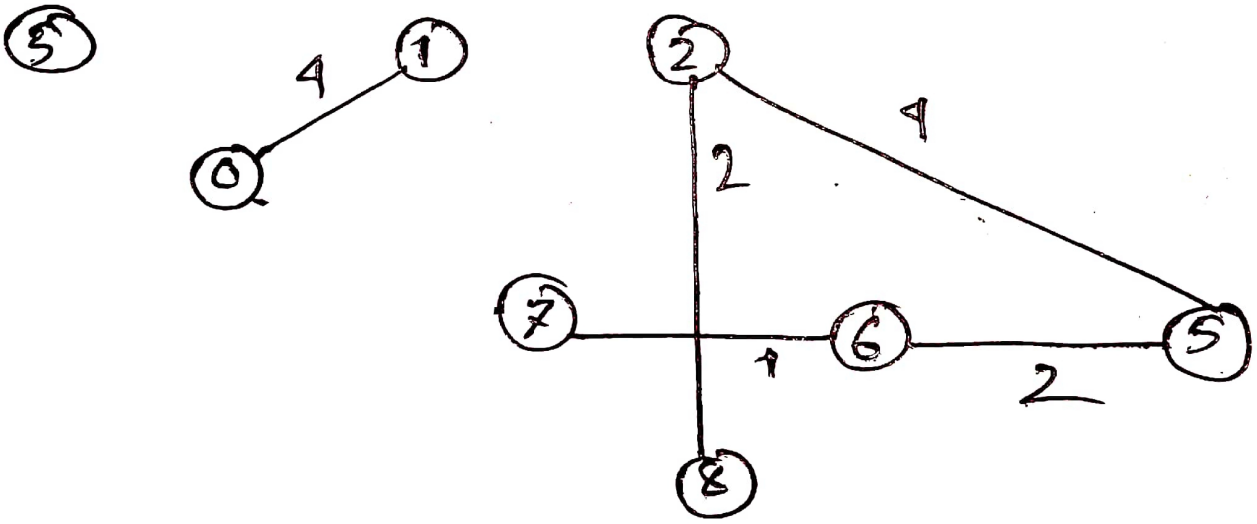
step:

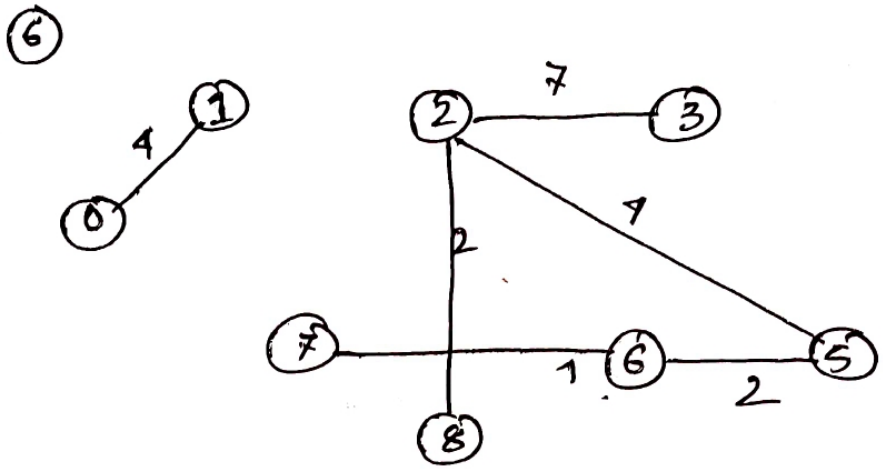
① 

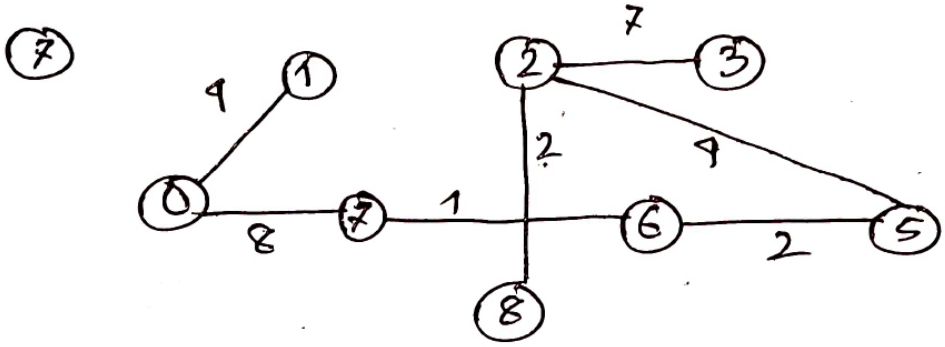
② 

③ 

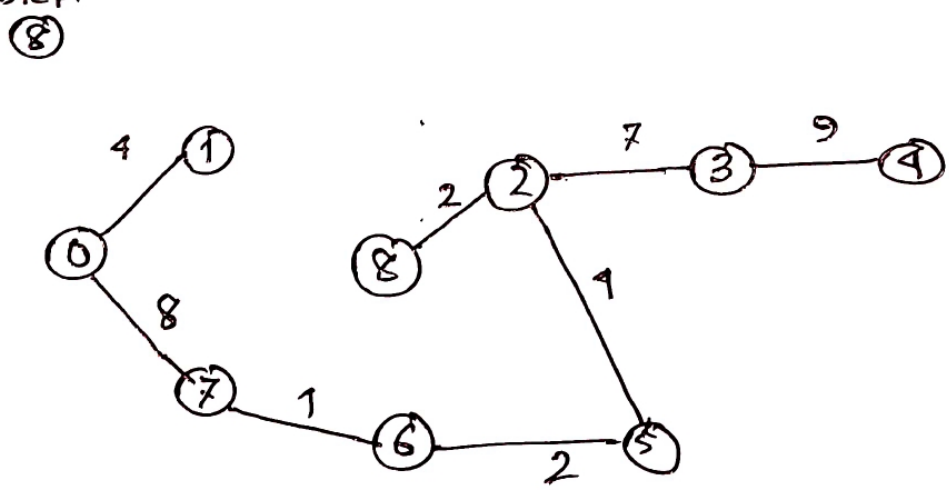

4
4
1
0
2
2
7
1
6
2
5
8


5
4
1
0
2
4
2
7
1
6
2
5
8





step:



Final output.