

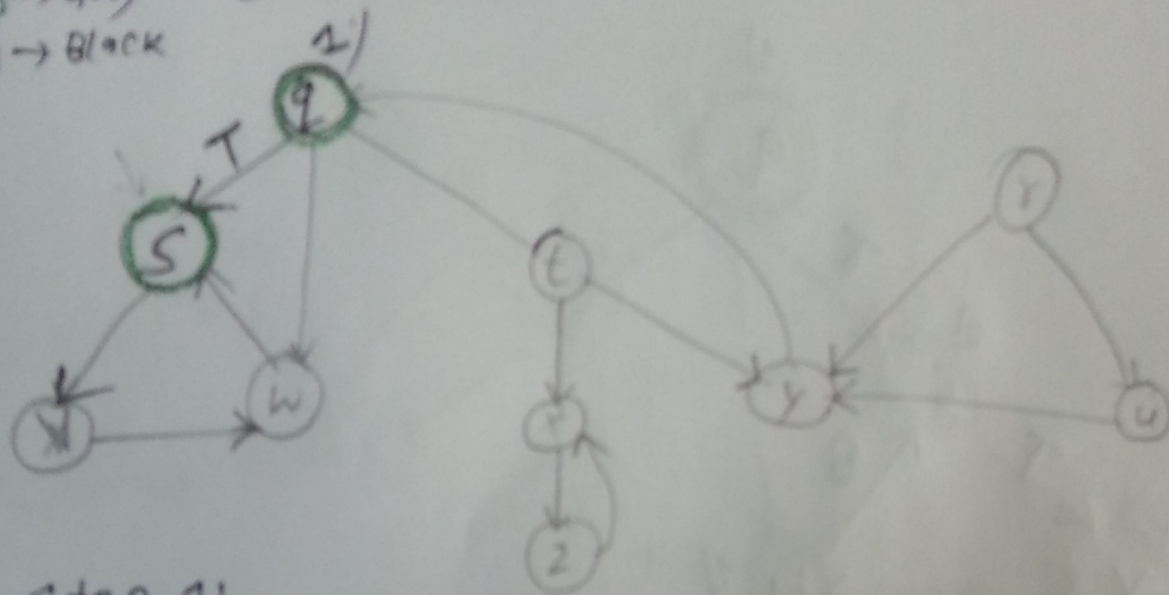
Lab-11

Group-2

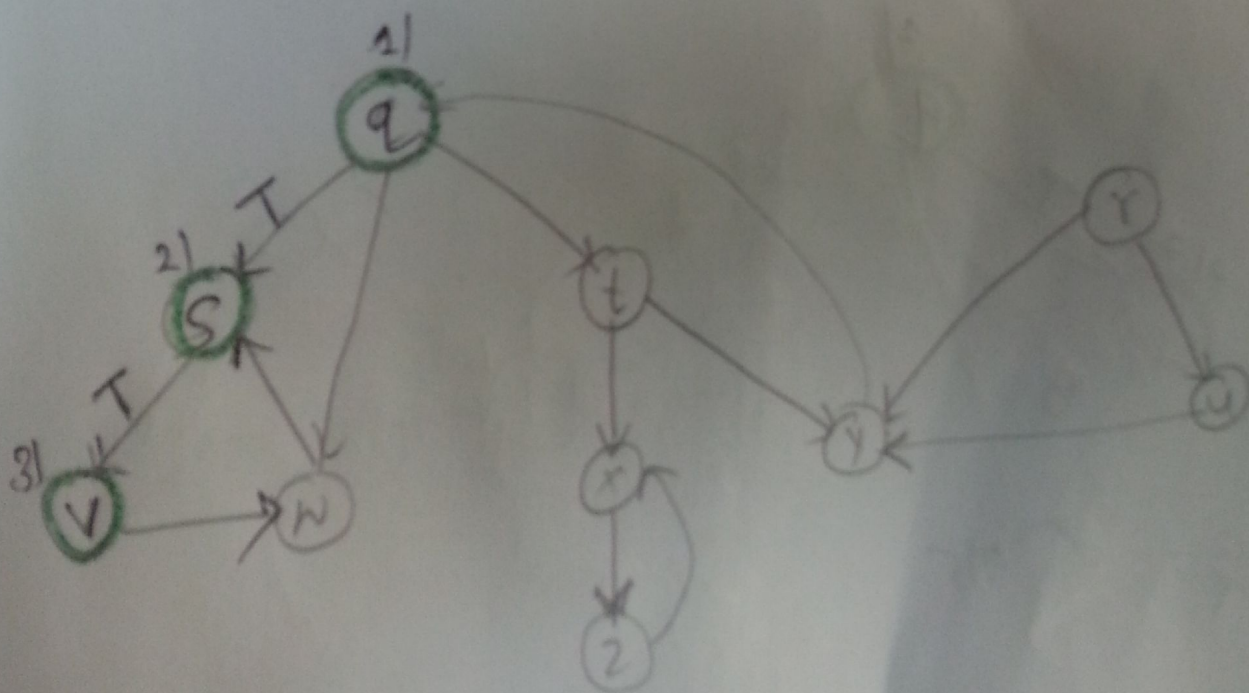
Q. 2.A [DFS]

Here: ○ → Gray
○ → Black

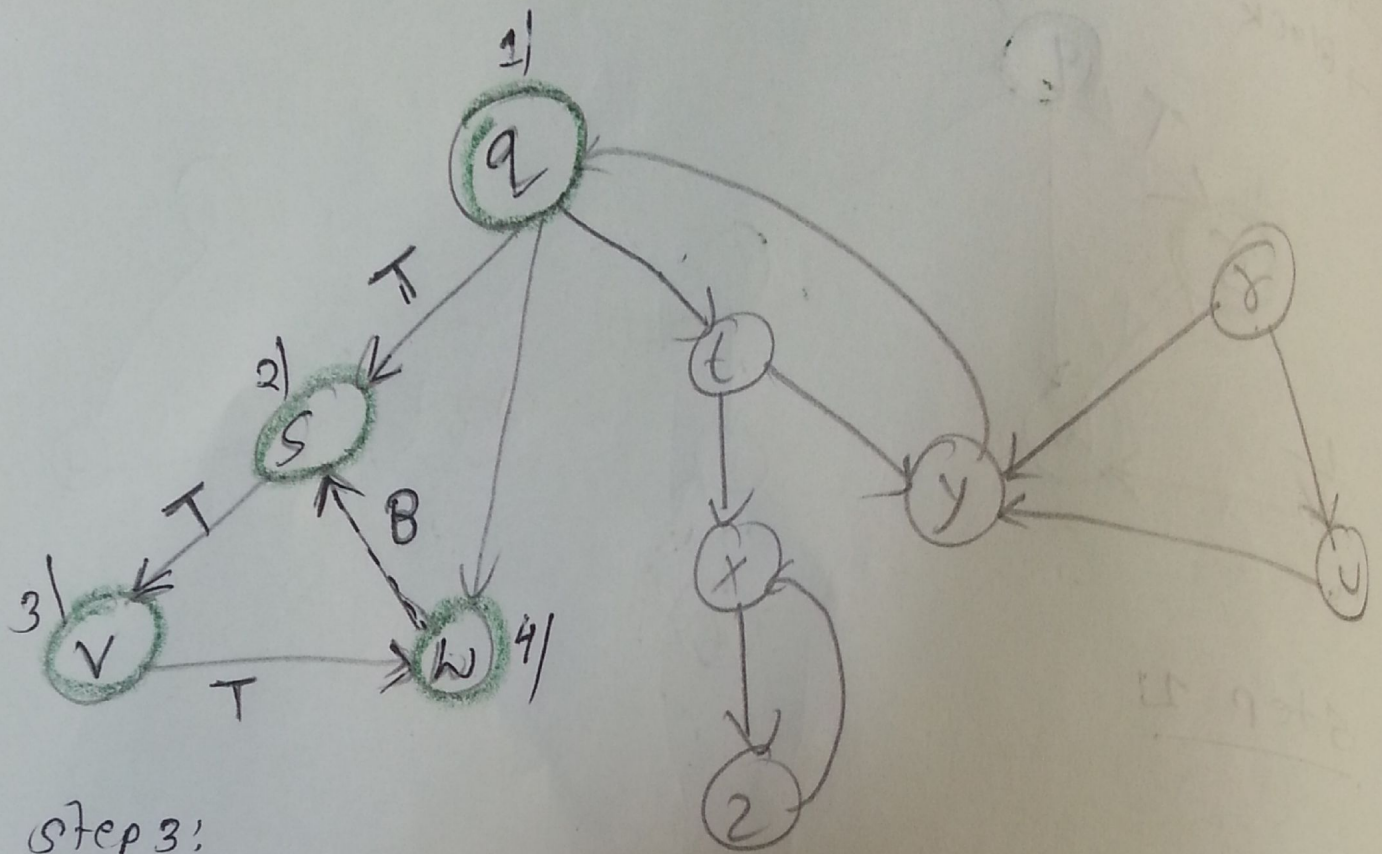
○ → White.



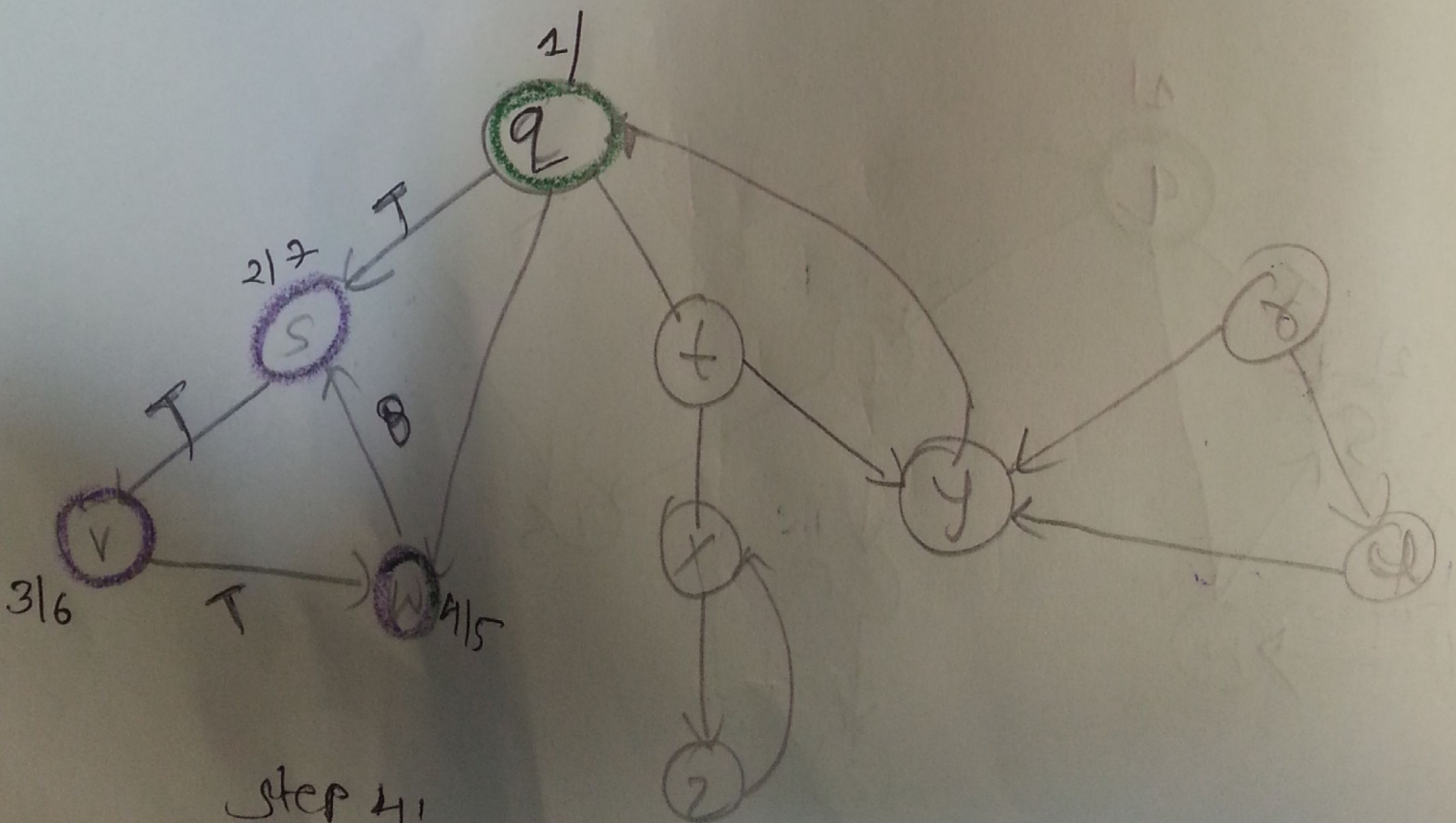
Step 1



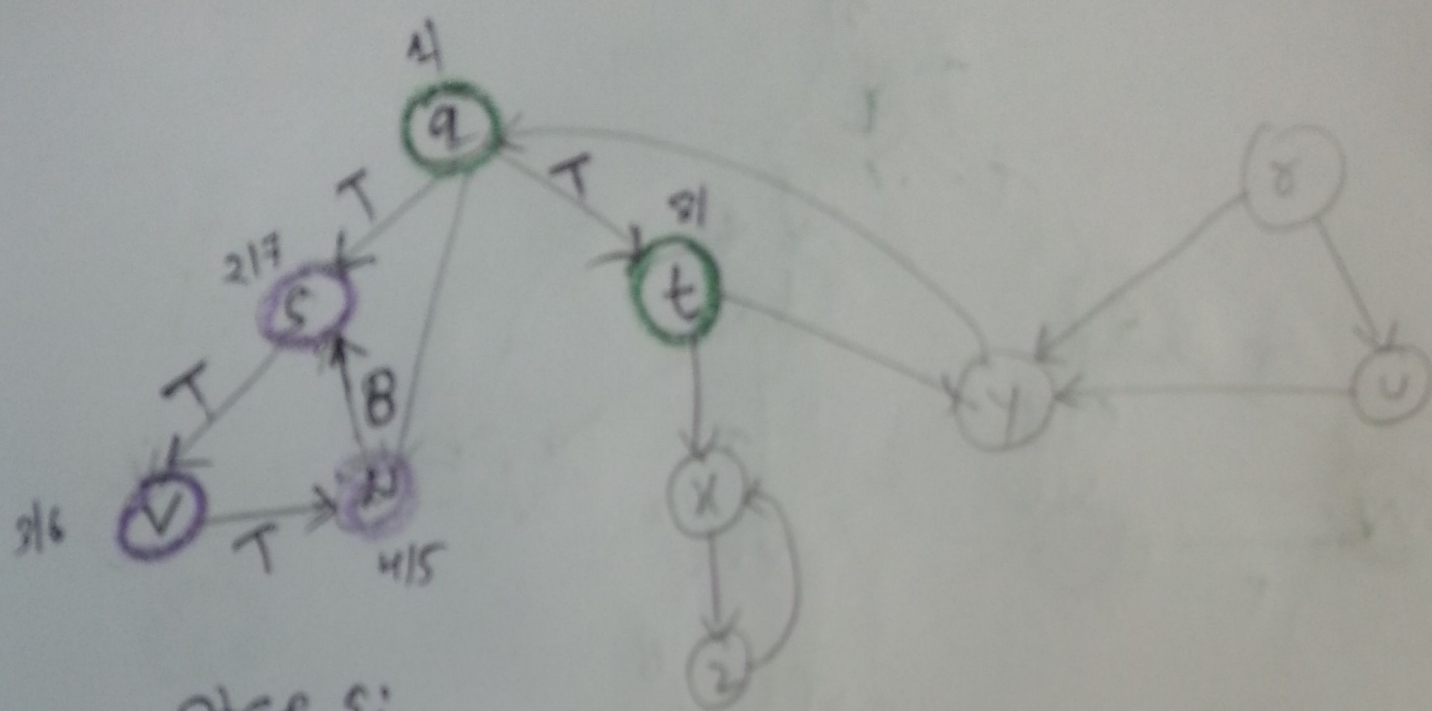
Step 2



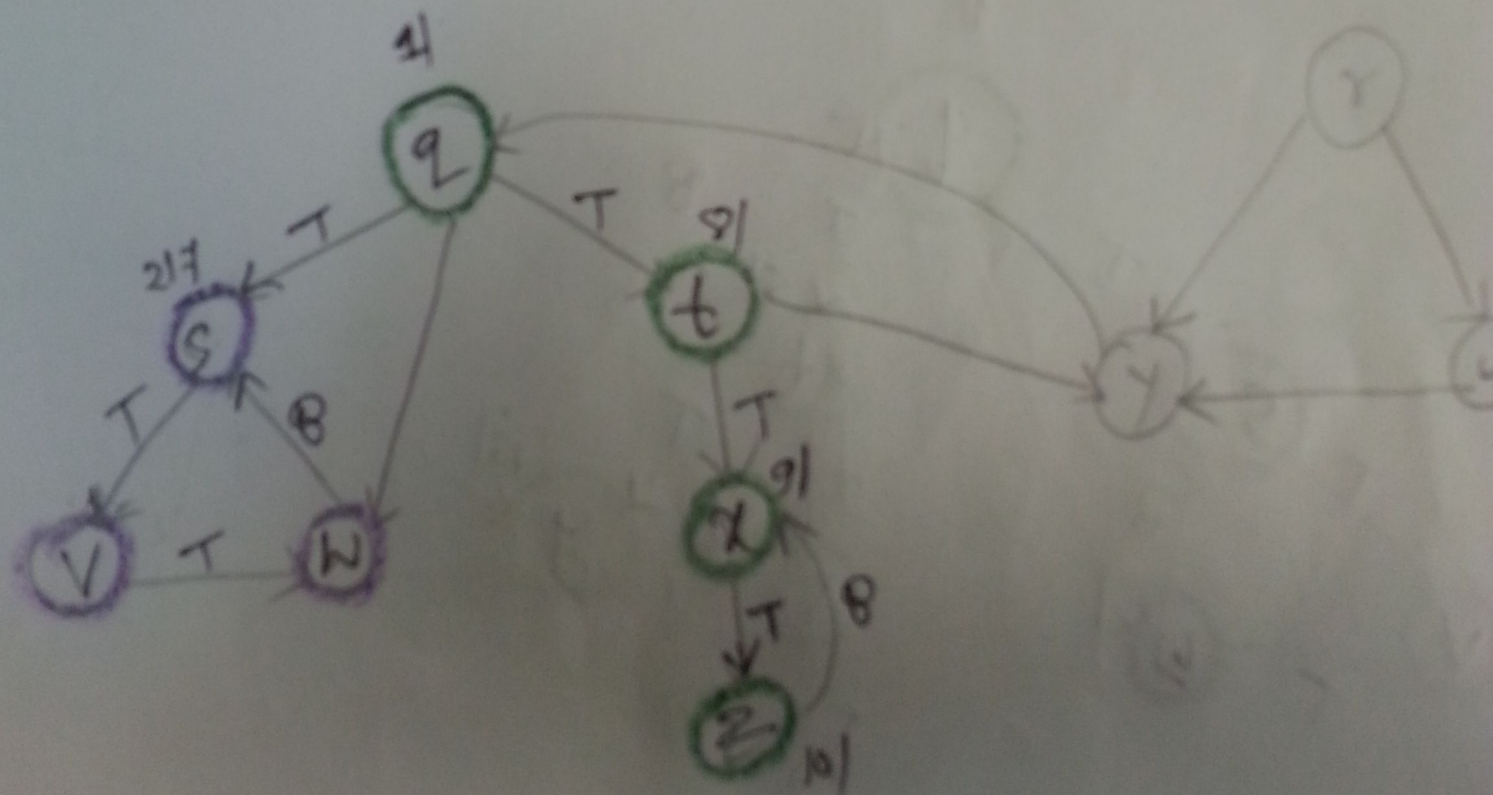
Step 3:



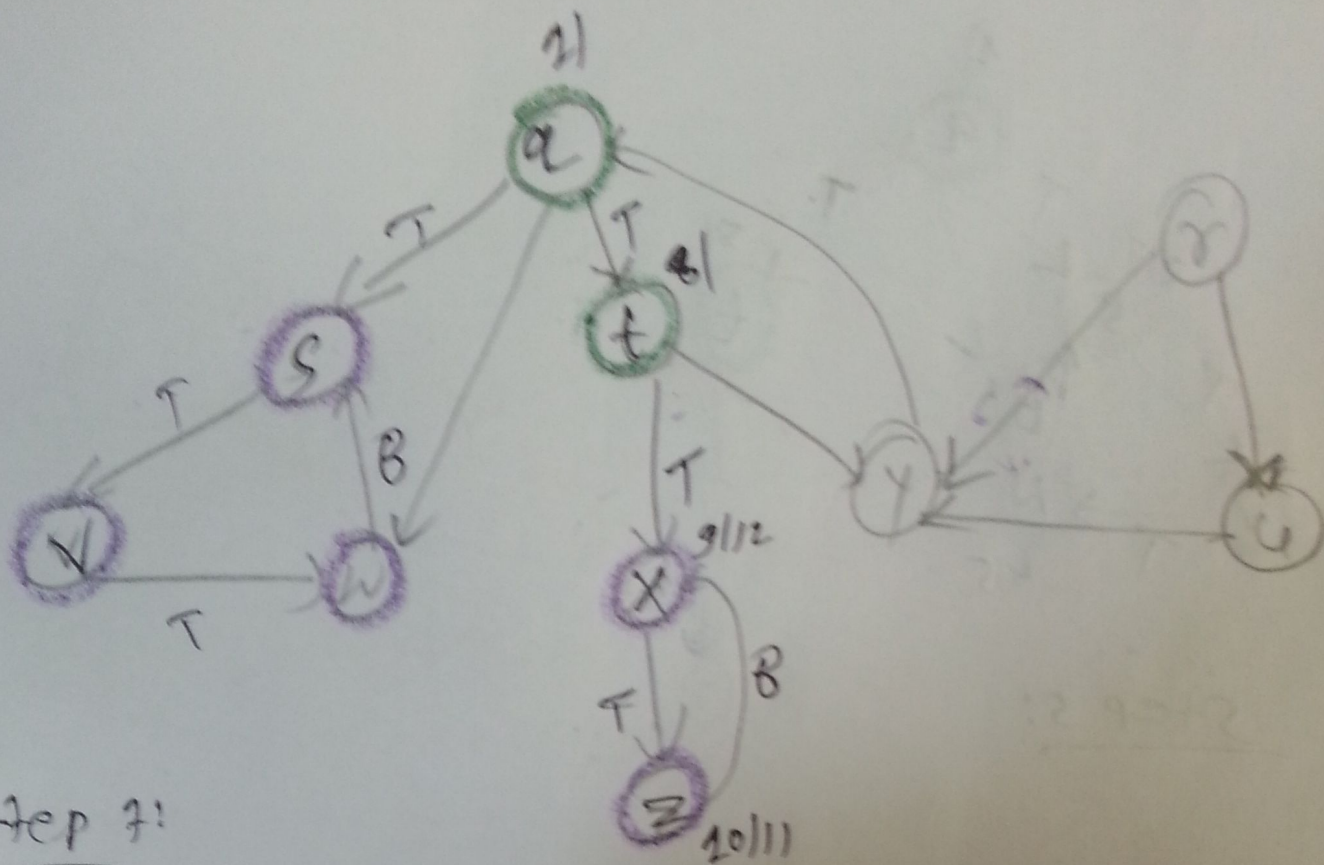
Step 4:



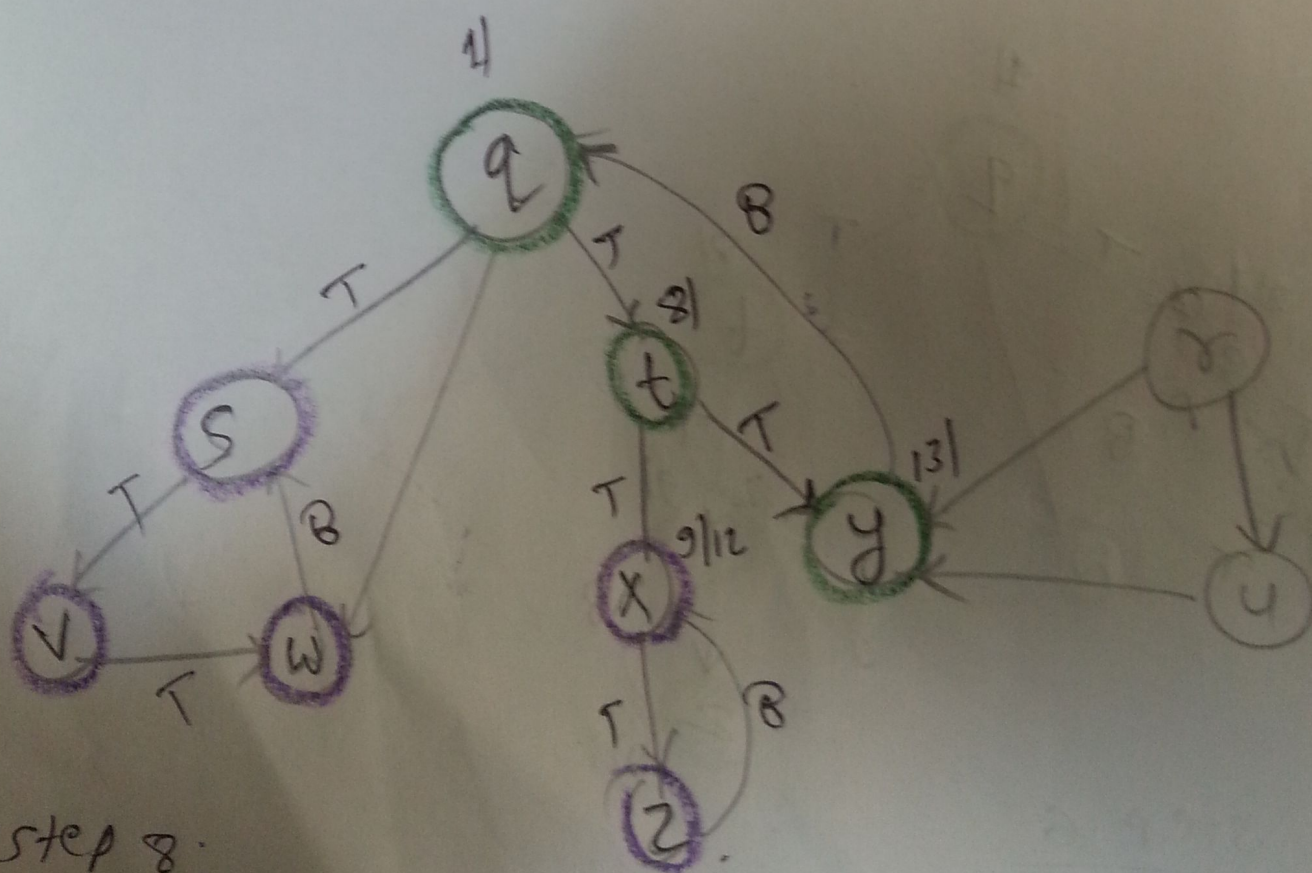
step 5:



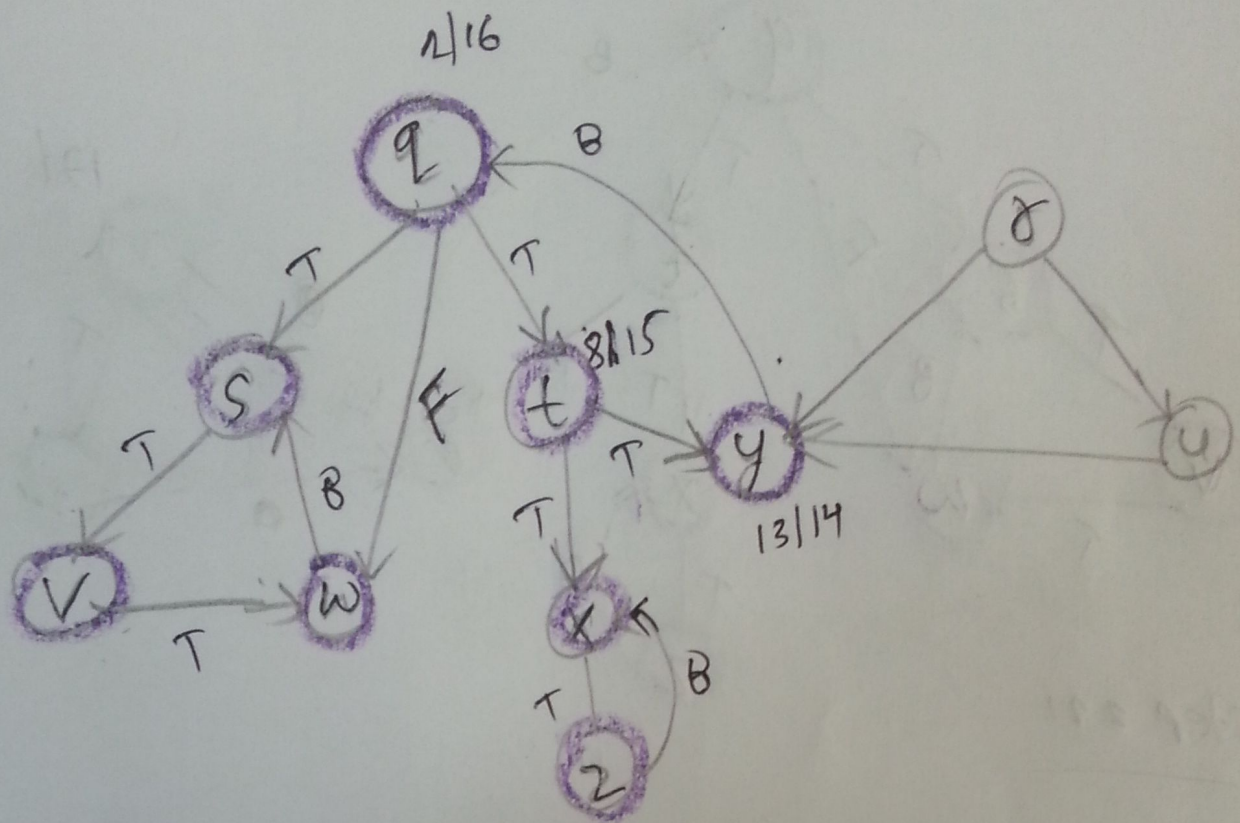
step 6:



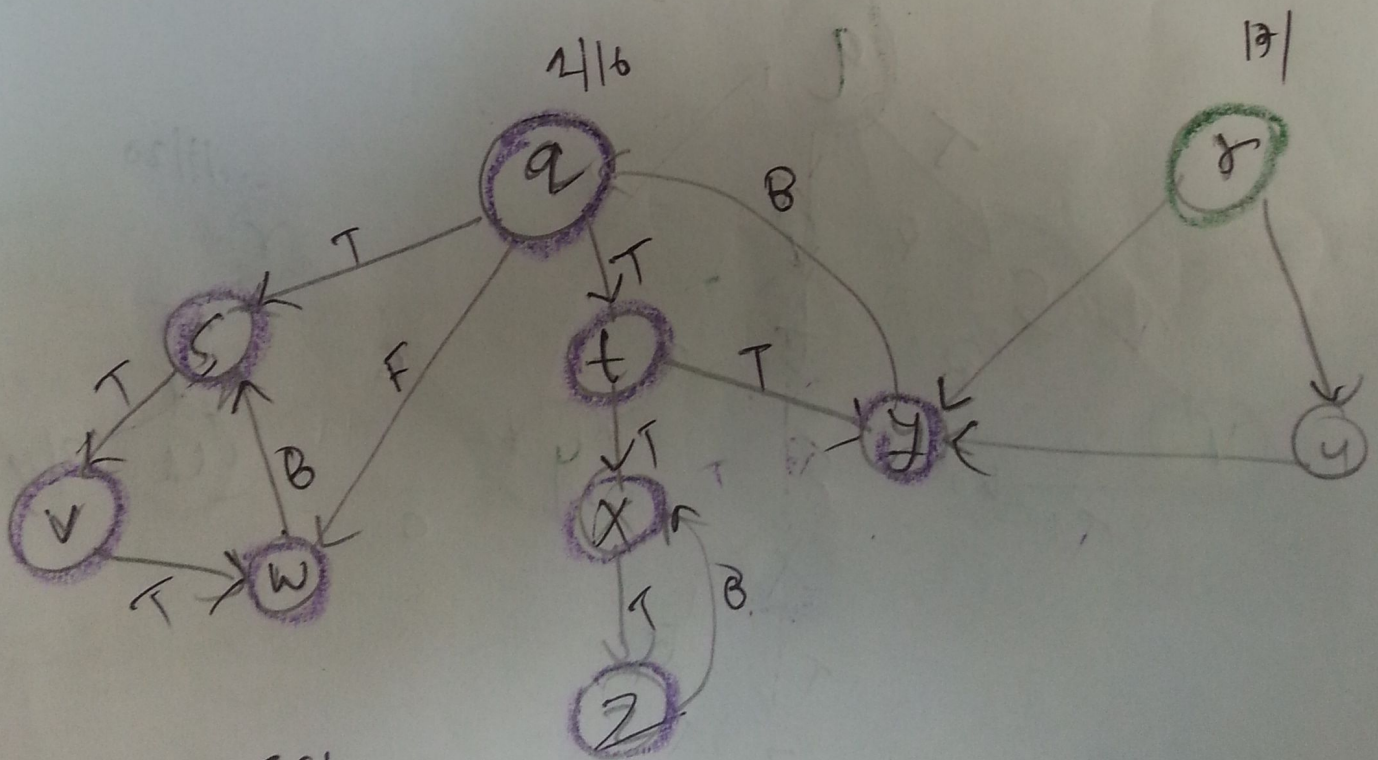
step 7:



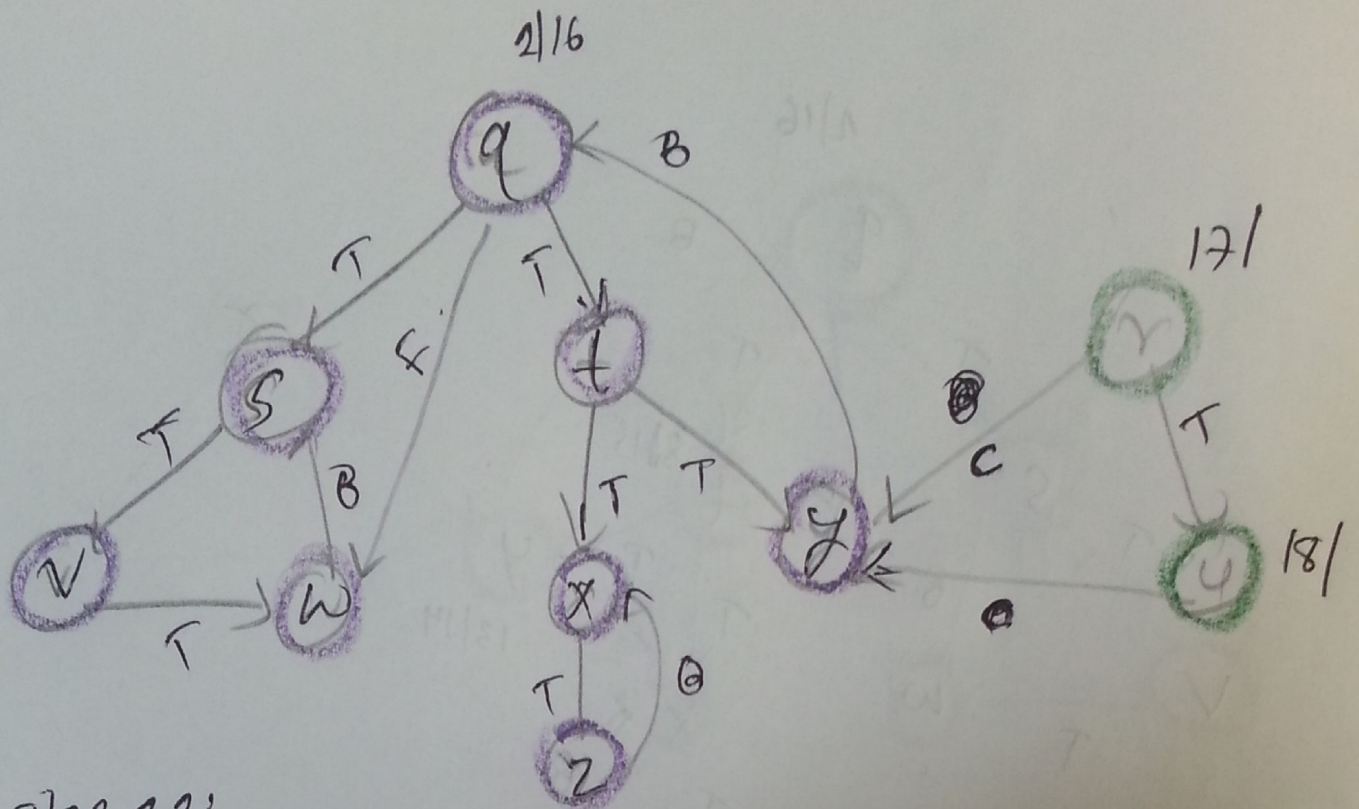
step 8:



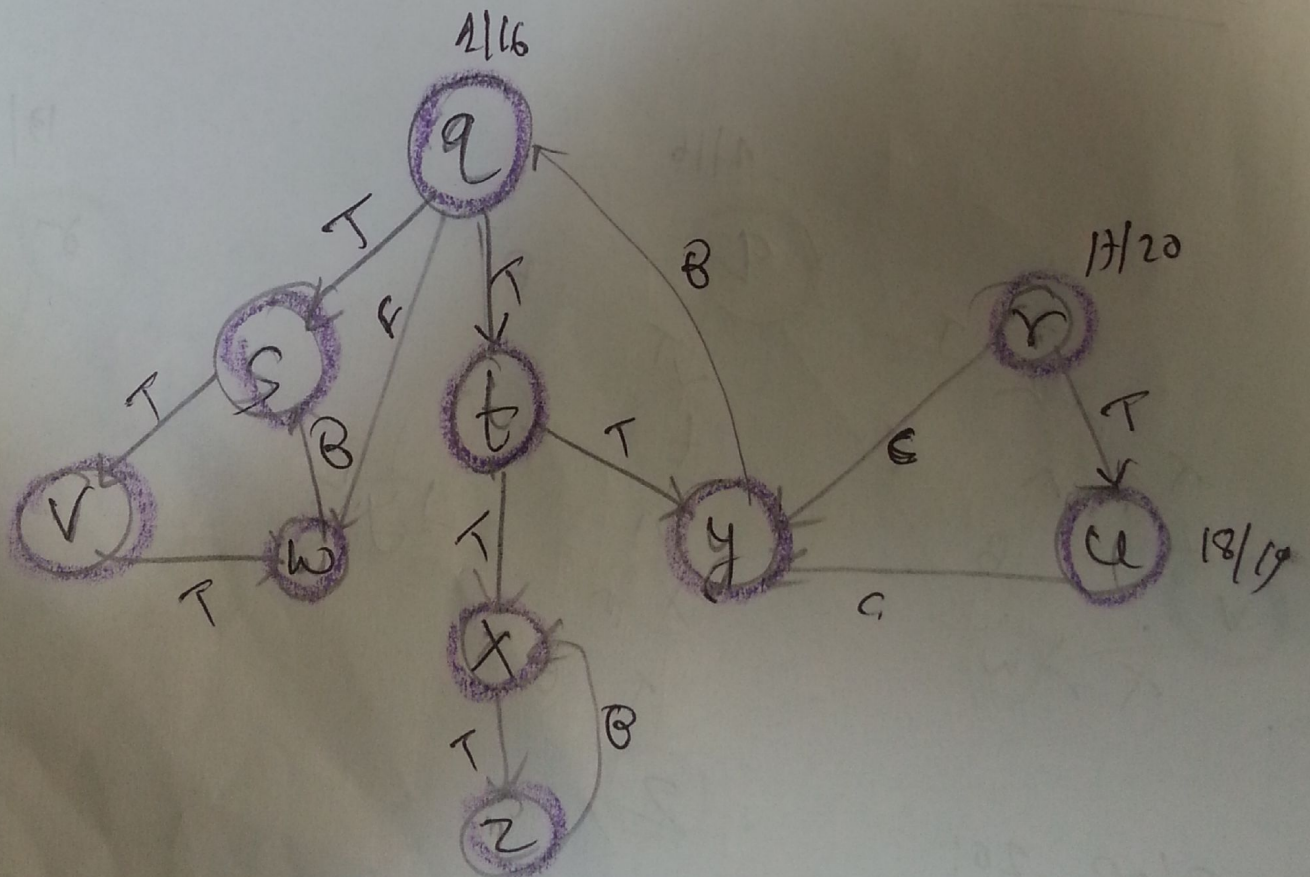
Step 9:



Step 20:

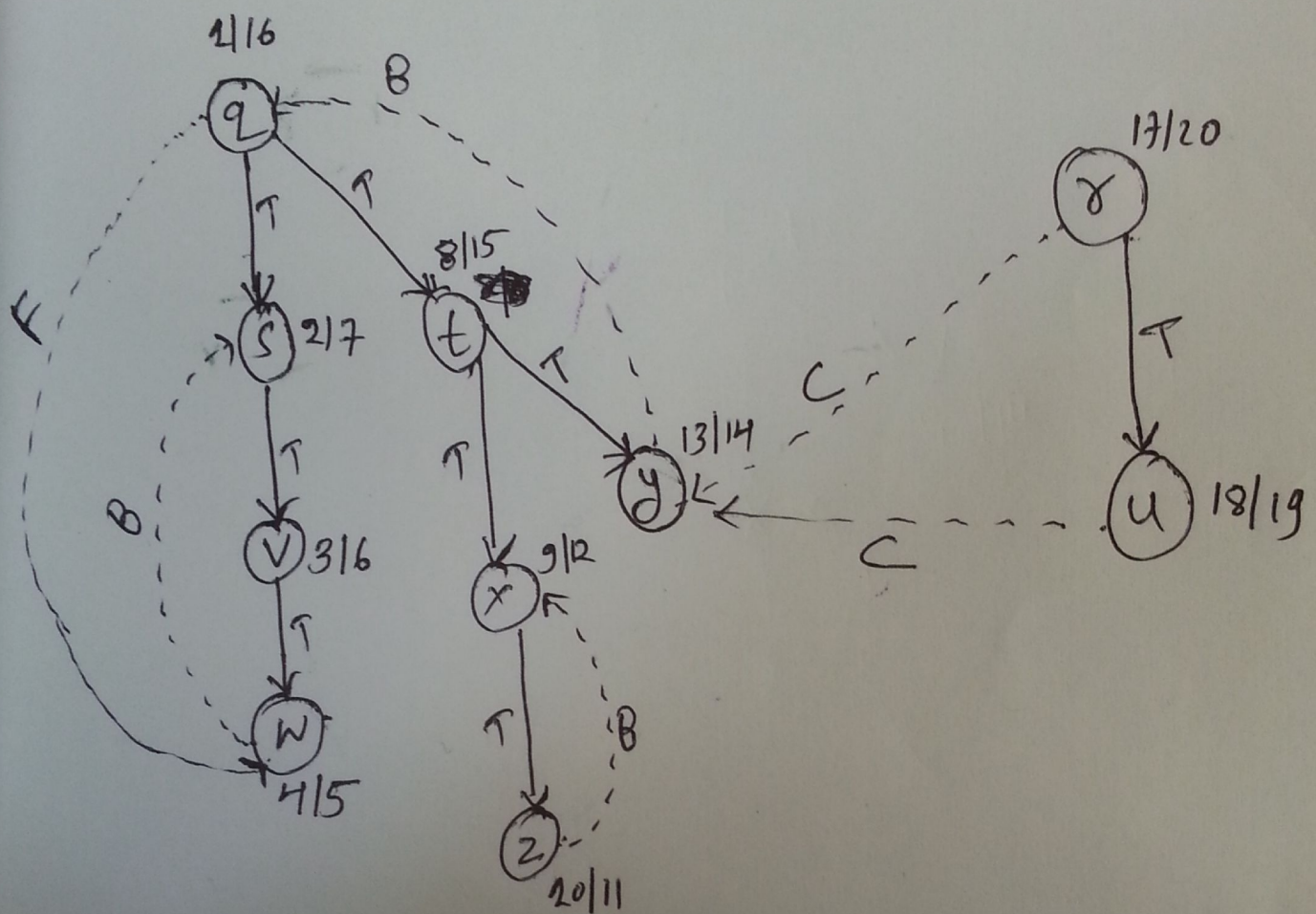


Step 21:



Step 22:

The final tree is as follows



Here $\frac{d}{f}$: where d = discovery time & f = finishing time.

searching time for each vertex