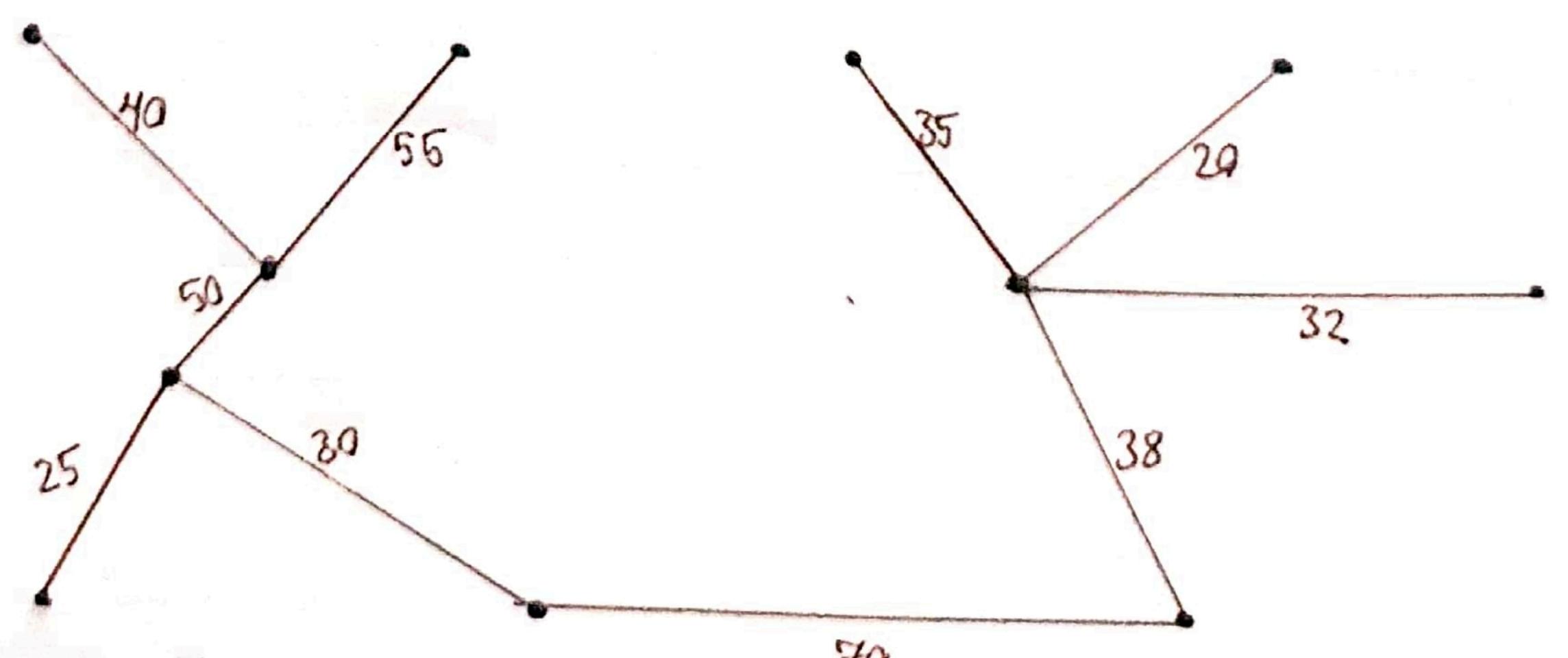


we start with the edge which has the less weight. Then we consider it and continue until we encounter with a cycle. Then if an edge causes a cycle, we will discard that edge. In the end, we would have (n-1) node with the less weight.

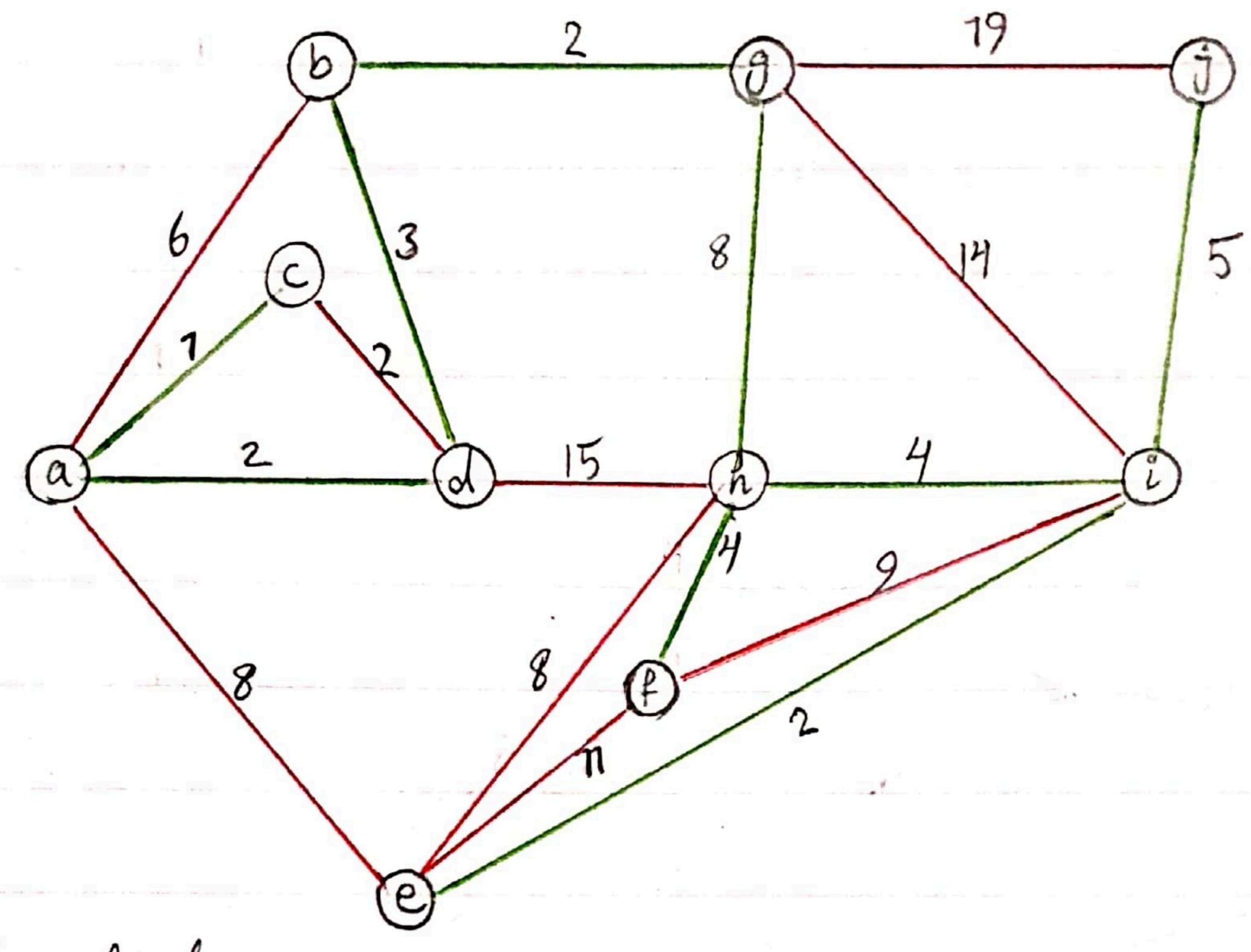
n-1 = 11 - 1 = 70

The minimum spanning tree using kruskal's algorithm:

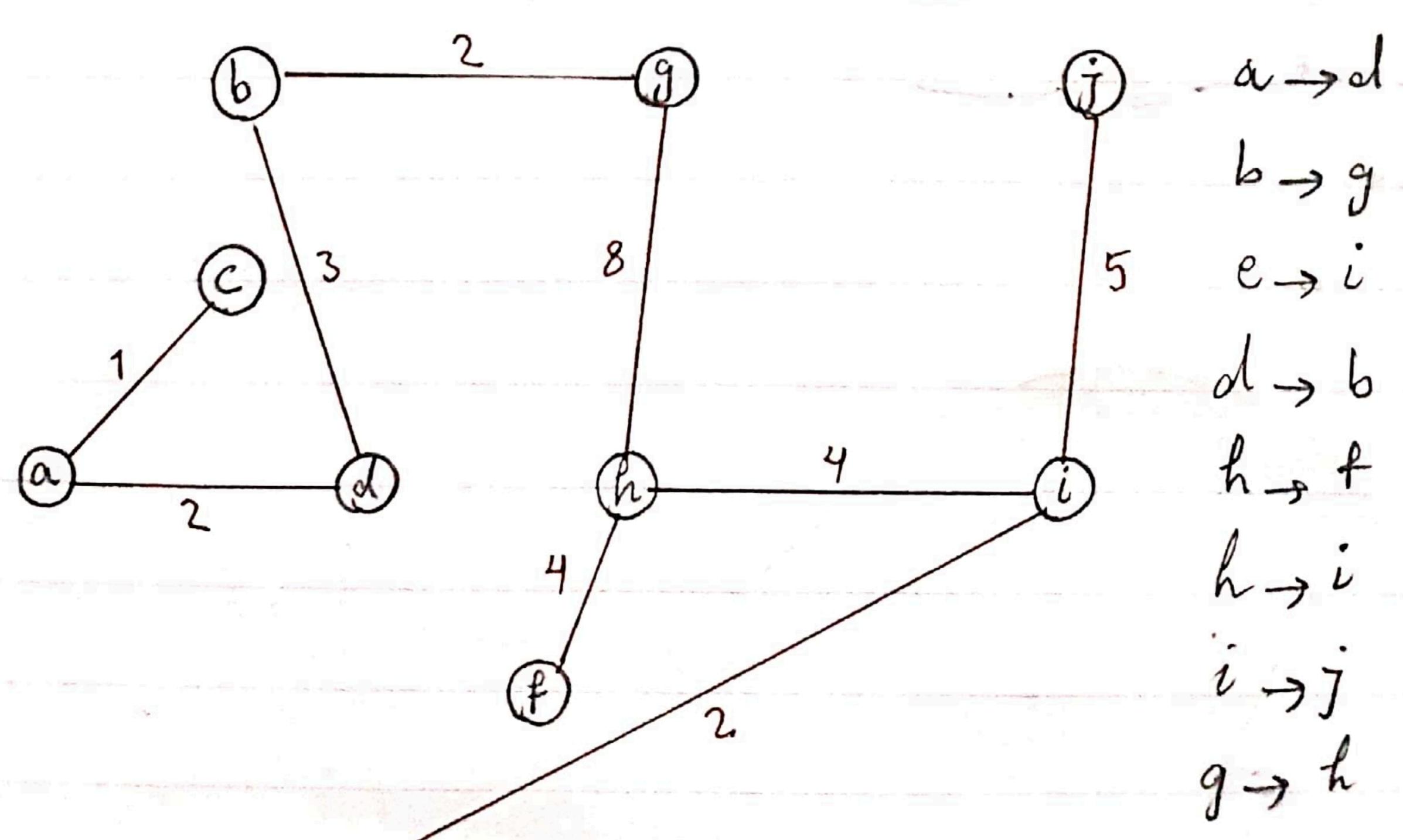


Total: 20+25+30+32+35+38+40+50+55+70=395]

The salution is similar to previous question: $n-1 = 10-1 = 9 \rightarrow \text{number of ealges}$

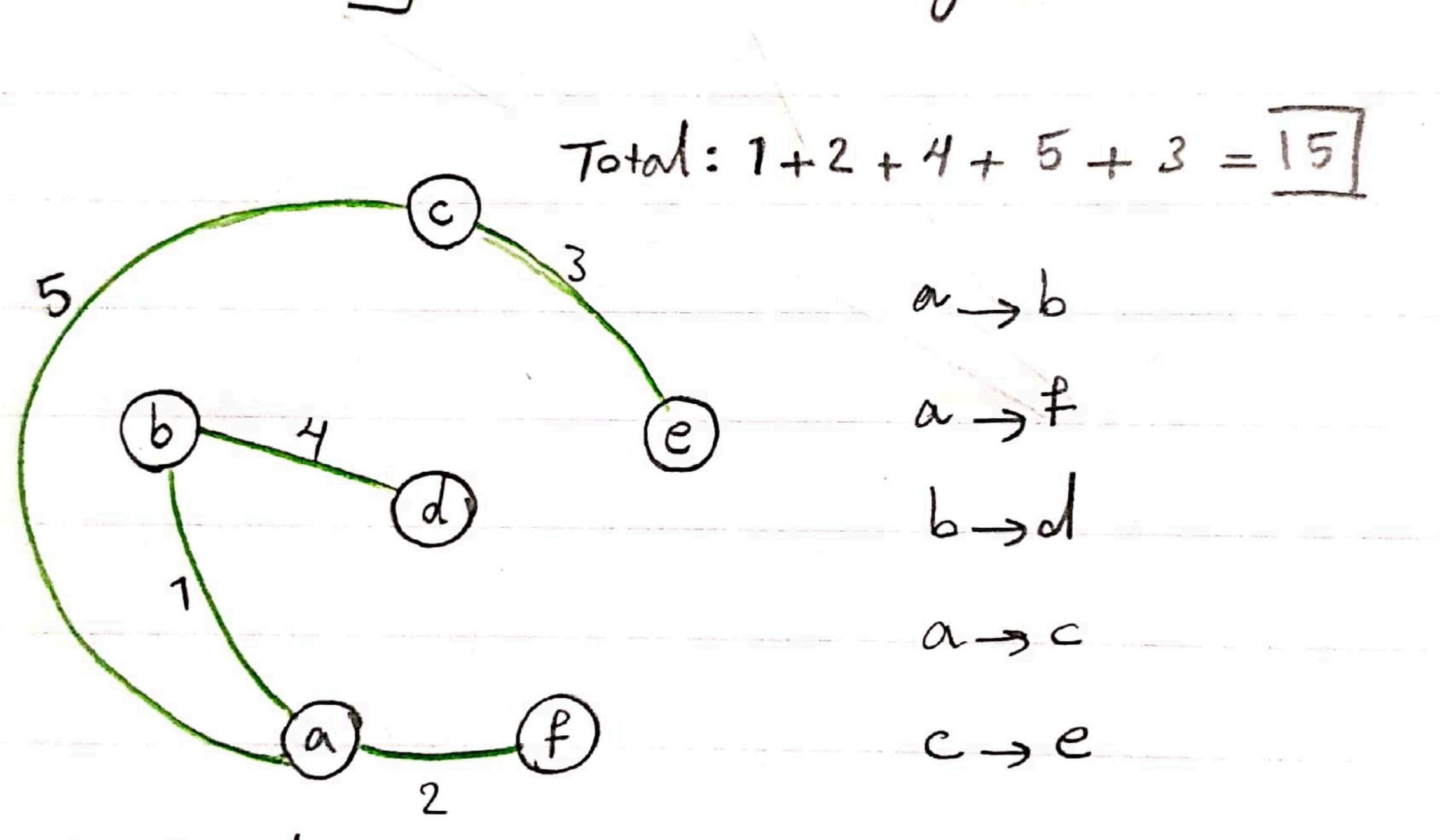


The final minimum spanning tree:



(3)

Prim's algorithm: We start with a desired vertex and in each step, we should choose an edge between edges which are connected to the vertex that we have chosen. Well, because it is MST, we should choose the edge which has less weight. Consider that, like kruskal's algorithm, we can't have cycles. OK, in this case we'll start with "a". $N-1=6-1=\overline{5}$: number of edges



Krus kal's algorithm:

Total:
$$1+2+3+4+5=15$$

a $\rightarrow b$

a $\rightarrow f$

e $c \rightarrow e$

b $\rightarrow d$

a $\rightarrow c$