Prob. 1	Prob. 2	Prob. 3	Prob. 4

Problem 1.

just checking degree if it is 1, take edge we are going over vertexes to check their degree, if degree is 1, we take its edge then we go over higher degree vertexes, if there aren't connected, we take their smallest cost edge

we can have a set S with unexplored vertices take one vertice, if it is degree=1 put the vertice + the edge in the graph

but we have to connect the vertices of degree 1 first

Problem 2.

Problem 3.

here, I don't really get how to calculate the gain of reliability do we have to construct our own function to calculate it? in some sense, we need to bound it but I think it would be easier after asking

for example, we can assume only nodes access file can update them

Problem 4.

if each column and row contains at least one 1, then it is ok