


## 990. Satisfiability of Equality Equations

$$a == b$$

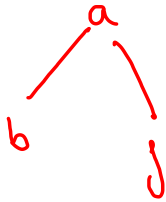

$$b != e$$


$$c == d$$


$$c != a$$


$$e == k$$


$$f == b$$

equalities: create sets  
(apply DSU)

inequalities: verification

## 856 · Sentence Similarity

Algorithms

Easy

Accepted Rate 45%



symmetric ✓  
transitive ✗

pairs: [great, fine] [great, good] [fine, nice]  
[acting, drama] [talent, skill]

great	drama	talent
nice	acting	skill

great → fine, good  
fine → great, nice  
good → great  
nice → fine  
acting → drama  
drama → acting  
talent → skill  
skill → talent

## 855 · Sentence Similarity II ✓

symmetric ✓  
transitive ✓ → DSU

pairs: [great, fine] [great, good] [fine, nice]  
[acting, drama] [talent, skill] [good, fine]

great  
nice

drama  
acting

talent  
skill



acting  
drama

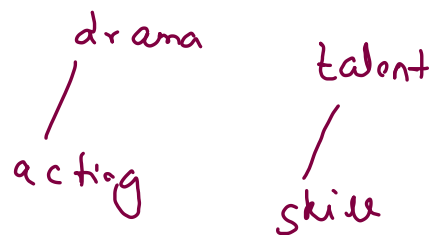
talent  
skill

pairs: [ great, fine ] [ great, good ] [ fine : nice ]  
[ acting, drama ] [ talent, skill ] [ good : fine ]

parent :

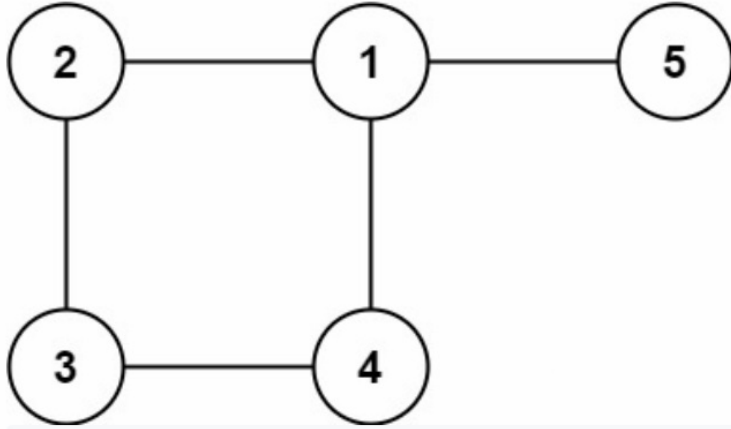
great → fine  
fine → fine  
good → fine  
nice → fine  
acting → drama  
drama → drama  
talent → talent  
skill → talent

parent : HM < string, string >  
rank : HM < string, int >



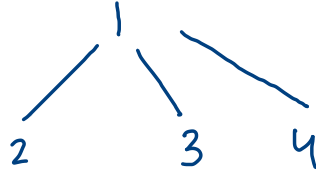
great	drama	talent
nice	acting	skill

## 684. Redundant Connection



Input: edges = [[1,2],[2,3],[3,4],[1,4],[1,5]]

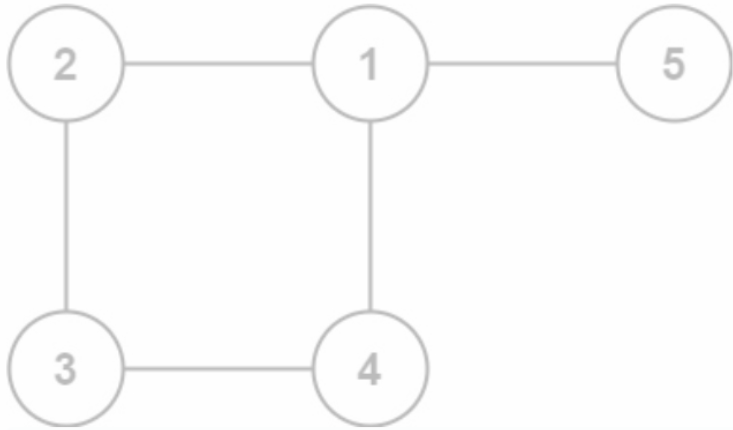
Output: [1,4]



5



problem statement: return the edge which has introduced cycle in this graph.



Input: edges = [[1,2],[2,3],[3,4],[1,4],[1,5]]

Output: [1,4]

