

GRAPHS...

video-32

"let's make it easy too"



If you have tried my Graph Concept & Qns playlist, these Qns, will seem very easy. Do try it once ;)

Maximal Network

Rank

1615. Maximal Network Rank

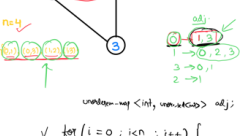
Medium 1279 110 Add to List Share

There is an infrastructure of n cities with some number of roads connecting these cities. Each $roads[i] = [a_i, b_i]$ indicates that there is a bidirectional road between cities a_i and b_i .

The network rank of two different cities is defined as the total number of directly connected roads to either city. If a road is directly connected to both cities, it is only counted once.

The maximal network rank of the infrastructure is the maximum network rank of all pairs of different cities.

Given the integer n , and the array $roads$, return the maximal network rank of the entire infrastructure.



```
unordered_map<int, unordered_set> adj;
```

```
for (i = 0; i < n; i++) {
```

```
    for (j = i + 1; j < n; j++) {
```

$O(N^2)$

$i_rank = adj[i].size();$

$j_rank = adj[j].size();$

$total = i_rank + j_rank$

$if (adj[i].find(j) != adj[i].end())$

$total -= 1;$

$maxRank = max(maxRank, total);$

Another way to code :-

