Sample Input

```
8
4 5 7
5 6
6 7
7
0 7
0 1
1 2 7
0 2 3 4 6
4
1 2
0 2
3 0 1
2
0
```

Output for Sample Input

```
3
2
```

We plan to set up two test cases for automated marking. For this assignment name your source code `edgeNetworkE.ext` or `edgeNetworkH.exe`, where `ext` denotes one of { `java`, `cpp`, `py` } that indicates java/c++/python language. Please use just one source file per problem. Here the suffix `E` of the basename denotes 'E'asy (test data) and `H` denotes 'H' arder (test data). Two marks are allocated for `edgeNetworkE.ext` and one mark is for `edgeNetworkH.exe`; or, three marks obtainable for this part of the assignment.

Conjested Networks (part 2)

We extend the problem of the previous section to the case were we want to count only *vertex-disjoint* paths as a measure of conjestion. For this case, the two paths through node 7 of the previous example are not allowed. However, there does exist another pair of nodes (e.g. 6 and 7) that do have three vertex-disjoint paths between them. The input and output specifications are the same as before. For this problem submit a program named `vertexNetworkH.ext`. This problem is worth two of the five total marks allocated for this assignment.