Fridays for Future 2

After the great results of the green party at the elections, people feel your goal has been achieved and interest in fridays for future demonstrations in your home town has dramatically decreased. All but six fellow protesters have deserted the movement. Is there a way to distribute the six protesters on road intersections in such a way that everyone that travels along a road will see at least one protester?

Input: Your home town is given as a graph where roads are represented by edges and intersections are represented by nodes. The first line of the input contains two numbers, the number of nodes n, and the number of edges m. This is followed by m lines containing two integers $a, b \in \{0, \ldots, n-1\}$. Each such pair describes an edge in the graph.

Output: Output `possible`, if you can find a suitable vertex cover with six vertices, otherwise output `impossible`.

Sample Input:

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

Sample Output:

```
possible
```