In ABC company, team lead need to discuss about a new project. So that he gathered the team members at a place. One of the team member couldn't understand the theme is willing to reach out his colleague in shortest time period.

Note: The meeting room has been modelled as a directed graph.

Input Format:

First line is a positive integer n, 1<=n<=20 denoting the number of employees in the meeting. Next consecutive n lines are the unique id's of employees.

Next line consists of a positive integer s, denoting all the ways to reach from one employee to another employee

Next consecutive s lines, contains two employees that are adjacent with some distance.

Next line consists of the id of the employee who got a doubt.

Last line consists of the id of the employee who will clarify doubt.

Output Format:

1; if an employee can reach another employee.

0; if an employee can't reach another employee.

Sample Input:

5

2

5

7

6

9

5

29

7 2

7 9

6 5

9 5

2

Sample Output:

1

Solution:

```
graph = [[] for _ in range(100000)]
def addEdge(S, D):
  graph[S].append(D)
def neighbour(S, V):
  node=[]
  if (len(graph[S]) > 0):
     for i in range(len(graph[S])):
        node.append(str(graph[S][i])) \\
     return " ".join(node)
  else:
     return -1
v = int(input())
for i in range(v):
  h=int(input())
e = int(input())
for i in range(e):
  x,y = map(int,input().split())
  addEdge(x,y)
S = int(input())
D=int(input())
I=neighbour(S,v)
if str(D) in I:
  print(1)
else:
  print(0)
```