

# Rerouting

Your company has  $N$  servers. The information flows from one server to another through a connection.

If the information flows from server  $i$  to server  $j$ , then  $connection_i = j$ . It's possible for some server  $connection_i = i$ , meaning information doesn't flow further.

You are given an array  $connection$  consisting of  $N$  integers. You are tasked with making minimum number of changes to  $connection$  array values so that the information from all servers can reach at exactly one server in the whole network, where it terminates.

If node  $X$  is terminal server, then  $connection_X = X$ .

## Input Format

First line contains an integer  $N$ , no of servers in the network.

Second line contains  $N$  integers,  $i^{th}$  of which is  $connection_i$ .

## Constraints

- $1 \leq N \leq 3 \cdot 10^5$
- $1 \leq connection_i \leq N$

## Output Format

An integer representing minimum number of changes required.

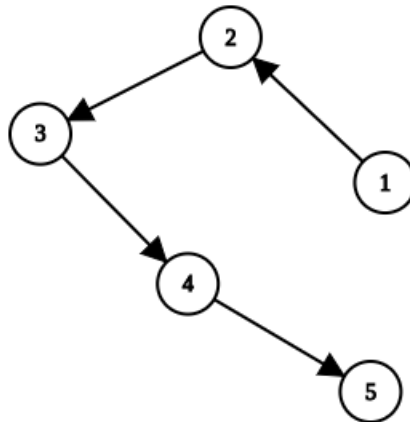
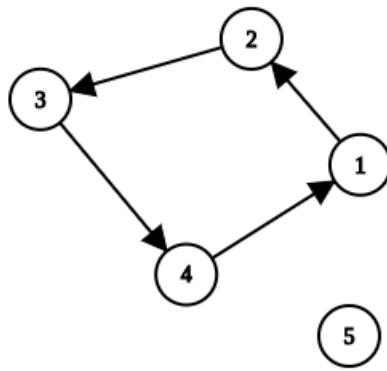
## Sample Input 0

```
5
2 3 4 1 5
```

## Sample Output 0

```
1
```

## Explanation 0



We can choose node **5** as our terminal server and connect  $4 \rightarrow 1$  edge to  $4 \rightarrow 5$ . Our modified connection array becomes  $\{2, 3, 4, 5, 5\}$  after making just **1** update.

### Sample Input 1

```

4
1 2 3 4

```

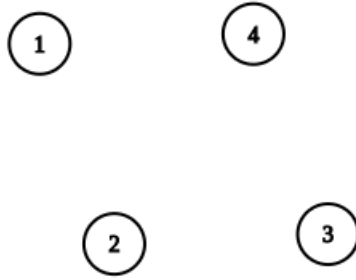
### Sample Output 1

```

3

```

### Explanation 1



We can select **1** as our terminal server and connect rest of the nodes to **1**. The modified connection array becomes {**1**, **1**, **1**, **1**}.

