

**GD7:** Monitoring a spy network (1 sec)

**問題描述：**

A spy network consists of  $N$  spies and every spy except for the chief has exactly one direct leader. Communication only happens between a spy and his direct leader, and all spies use a special kind of phones to communicate. We want to record all the communications in the spy network by monitoring the phones of some spies. To record the communication between spies  $A$  and  $B$ , we need to monitor the phone of  $A$  or  $B$ , or both. For the sake of safety, the number of phones we monitor should be minimized. Given the structure of a spy network, your job is to compute the minimized number of monitored phones such that all the communication can be recorded.

**輸入說明：**

The input consists of a number of test cases. The first line is an integer  $T$  which is the number of test cases, and the test cases follow one by one. The input of a test case consists of two lines. The first line contains an integer  $N$ ,  $0 < N < 10000$ , which is the number of spies. Each spy has a unique ID between  $0$  and  $N-1$ . For each spy, his/her ID must be larger than the ID of his/her direct leader. The chief has ID  $0$  and is the only one without direct leader. The second line contains  $N-1$  integers  $t(1), t(2), \dots, t(N-1)$  such that  $t(i)$  is the direct leader of  $i$  for all  $i$ . Any two consecutive numbers in the same line are separated by a space.

**輸出說明：**

Output the minimized number of phones to be monitored.

**範例：**

Sample Input:	Sample Output:
1 5 0 1 1 3	2