# Happy Birthday!

*Filename:* `birthday`

Remember Lior, one of the main characters from the other two problems? You may not have read them yet. Fun fact: today is Lior's birthday! When I asked him what he wanted for his birthday, he wished for a geometry problem. However, as he may be finding out right now, there is no geometry problem on this set. Instead, for his birthday Lior received an array of $n$ integers.

Lior loves math, so just like every math lover he has a set of favorite numbers. Lior wants to know how many times one of his favorite numbers shows up in the array. Your task is to solve this problem before Lior and his team does.

**The Problem:**

Given an array and a set of integers, determine the count of integers in the array that belong to the set.

**The Input:**

The first line of the input file begins with a single, positive integer, $t$, representing the number of test cases. For each test case, three lines follow. The first of which has two integers, $1 \leq n,m \leq 10^4$, representing the number of elements in the array and the number of elements in the set, respectively. The second line has $n$ integers, representing the array Lior received for his birthday. The third line contains $m$ integers, representing the set of Lior's favorite numbers. The array may contain duplicate integers, but the set will not. Every element in the array or set will be a positive integer less than or equal to $10^9$.

**The Output:**

For each test case, output a single line saying "`Birthday #i: c`" without the quotes, where `i` is the number of the test case, and `c` is the count of integers in the array that belong to Lior's set of favorite integers.

**Sample Input:**

```
2
5 3
1 2 3 4 2
1 2 4
10 3
1 2 3 4 5 6 7 8 9 10
35 73 115
```

**Sample Output:**

```
Birthday #1: 4
Birthday #2: 0
```