Treasure

Jojo is the gamemaster of Harvest Sun Online. He wants to make an event called treasure hunt. There are M players that will participate in the event. He will put a single treasure in each of the N available areas.

The first player to reach an area first will get the only treasure in that area. Any other player who arrives in that area after the treasure has been taken by another player will return empty handed. Jojo wants to know how many players failed to get a treasure. In other words, you can assume that if an area is selected by more than one player, then only one of those players will manage to get the treasure hidden in that area.

Format Input

The input starts with an integer T, the number of test cases. Each test case starts with 2 integers N and M, describing the number of areas and the number of players. The next line will contain M integers, the i-th number P_i will describe the area that the i-th player plans to visit.

Format Output

For each test case output in one line "Case #T:" followed by the number of players that didn't get any treasure.

Constraints

- $1 \leq T \leq 10$
- $1 \leq N, M \leq 100,000$
- $1 \leq P_i \leq N$

Sample Input 1 (standard input)

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

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Sample Output 1 (standard output)

```
Case #1: 0
Case #2: 3
Case #3: 1
```

Sample Input 2 (standard input)

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

Sample Output 2 (standard output)

```
Case #1: 0
Case #2: 0
Case #3: 3
```

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Jojo adalah seorang gamemaster dari permainan Harvest Sun Online. Ia ingin mengadakan sebuah perlombaan mencari harta karun. Terdapat M peserta yang akan mengikuti perlombaan ini. Ia akan menyembunyikan tepat satu harta karun di setiap dari N area yang ada.

Pemain pertama yang tiba di suatu area akan mendapatkan satu-satunya harta karun yang ada di area itu. Pemain yang tiba di suatu area setelah harta karun diambil oleh pemain lain tidak akan mendapat apapun. Jojo ingin mengetahui berapa banyak peserta yang tidak mendapatkan harta karun sama sekali. Dengan kata lain, kamu dapat berasumsi bahwa jika ada lebih dari satu pemain yang memilih suatu area, maka hanya salah satu dari mereka akan mendapatkan harta karun yang disembunyikan di area tersebut.

Format Input

Baris pertama berisi bilangan bulat T, jumlah kasus uji. Setiap kasus uji berisi 2 buah bilangan bulat N dan M, yaitu jumlah area dan jumlah peserta yang mengikuti perlombaan. Baris berikutnya berisi M bilangan bulat, angka P_i pada urutan ke-i menyatakan area yang didatangi oleh peserta ke-i.

Format Output

Setiap kasus uji akan dimulai dengan "Case #T:" diikuti dengan jumlah peserta yang tidak mendapatkan harta karun sama sekali.

Constraints

- $1 \leq T \leq 10$
- $1 \leq N, M \leq 100,000$
- $1 \leq P_i \leq N$

Sample Input 1 (standard input)

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

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```
1 1 1 1
2 3
1 2 1
```

Sample Output 1 (standard output)

```
Case #1: 0
Case #2: 3
Case #3: 1
```

Sample Input 2 (standard input)

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

Sample Output 2 (standard output)

```
Case #1: 0
Case #2: 0
Case #3: 3
```

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