Get Me Petrol

TANK

50 Points

You are going on a long trip in your car which has a fuel tank capacity of L litres. You start out with an empty tank and visit a store which sells fuel in cans of specified quantity. You first walk through the store and create a list of C available cans. From this list you would like to buy two cans that add up to the entire capacity of the fuel tank.

The solution you provide will consist of two integers indicating the positions of the cans in the list. (smaller number first)

Input
The first line of input gives the number of cases, N. N test cases follow. For each test case there will be:

- One line containing the value L, the capacity of the fuel tank.
- One line containing the value C, the number of distinct cans in the store.
- One line containing a space separated list of C integers. Each integer Q indicates the quantity of fuel in a can.

Each test case will have exactly one solution.

Output
For each test case, output one line containing "Case #x: " followed by the indices of the two cans whose fuel quantity adds up to the capacity of the fuel tank . The lower index should be output first. Limits
$N \leq 55$
$C \leq 2000$
$L \leq 1000$
$Q \leq 1000$.

EXAMPLE:

Input:

```
3
100
5
5 75 25 33 12
200
4
150 50 88 345
8
8
2 1 9 4 4 56 90 3
```

Output:

```
Case #1: 2 3
Case #2: 1 2
Case #3: 4 5
```