10930   A-Sequence

For this problem an A-sequence is a sequence of positive integers a_i satisfying $1 \leq a_1 < a_2 < a_3 < \ldots$ and every a_k of the sequence is not the sum of two or more distinct earlier terms of the sequence.

You should write a program to determine if a given sequence it is or it is not an A-sequence.

Input

The input consists of a set of lines, each line starts with an integer $2 \leq D \leq 30$ that indicates the number of integers that the current sequence has. Following this number there is the sequence itself. The sequence is composed by integers, each integer is greater than or equal to 1 and less than or equal to 1000. The input is terminated by enf of file (EOF).

Output

For each test case in the input you should print two lines: the first line should indicate the number of the test case and the test case itself; in the the second line you should print 'This is an A-sequence.', if the corresponding test case is an A-sequence or 'This is not an A-sequence.', if the corresponding test case is not an A-sequence.

Sample Input

```
2 1 2
3 1 2 3
10 1 3 16 19 25 70 100 243 245 306
```

Sample Output

```
Case #1: 1 2
This is an A-sequence.
Case #2: 1 2 3
This is not an A-sequence.
Case #3: 1 3 16 19 25 70 100 243 245 306
This is not an A-sequence.
```