CP #23: Coin Collector

Our dear Sultan is visiting a country where there are n different types of coin. He wants to collect as many different types of coin as you can. Now if he wants to withdraw X amount of money from a Bank, the Bank will give him this money using following algorithm.

```
withdraw(X){
    if( X == 0) return;
    Let Y be the highest valued coin that does not exceed X.
    Give the customer Y valued coin.
    withdraw(X-Y);
}
```

Now Sultan can withdraw any amount of money from the Bank. He should maximize the number of different coins that he can collect in a single withdrawal.

Input Format

First line of the input contains T the number of test cases. Each of the test cases starts with n ($1 \le n \le 1000$), the number of different types of coin. Next line contains n integers C1, C2, …, Cn the value of each coin type. $C1 < C2 < C3 < \ldots < Cn < 1000000000$. C1 equals to 1.

Output Format

For each test case output one line denoting the maximum number of coins that Sultan can collect in a single withdrawal. He can withdraw infinite amount of money from the Bank

Sample Input 0

```
2
6
1 2 4 8 16 32
6
1 3 6 8 15 20
```

Sample Output 0

```
6
4
```