

# Problem E

## Coin Collector

**Input:** Standard Input  
**Output:** Standard Output

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:

First line of the input contains  $T$  the number of test cases. Each of the test cases starts with  $n$  ( $1 \leq n \leq 1000$ ), the number of different types of coin. Next line contains  $n$  integers  $C_1, C_2, \dots, C_n$  the value of each coin type.  $C_1 < C_2 < C_3 < \dots < C_n < 1000000000$ .  $C_1$  equals to 1.

### Output:

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	Sample Output
2	6
6	4
1 2 4 8 16 32	
6	
1 3 6 8 15 20	

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**Special Thanks To:** Mohammad Mahmudur Rahman