Problem R
Partition a Positive Integer
Time limit: 5 seconds
Memory limit: 256 megabytes

Problem Description

We say a multiset $S = \{s_1, \ldots, s_k\}$ of positive integers is a partition of a positive integer n if $\sum_{i=1}^{k} s_i = n$. For example, $\{1, 1, 3\}$ is a partition of 5. In general, a positive integer may have multiple potitions. However, elements in a multiset are unordered. That is, $\{1, 1, 3\}$ and $\{1, 3, 1\}$ are considered identical to each other. Write a program to compute the number of ways to partition an integer.

Input Format

The first line of the input contains an integer t ($t \leq 10000$) indicating the number of test cases. Each test case is one line containing a positive integer n which is at most 10000.

Output Format

For each test case, output the number of ways to partition n.

Sample Input

```
3
1
2
3
```

Sample Output

```
1
2
3
```