

People in Cubeland use cubic coins. Not only the unit of currency is called a *cube* but also the coins are shaped like cubes and their values are cubes. Coins with values of all cubic numbers up to  $9261 (= 21^3)$ , i.e., coins with the denominations of 1, 8, 27, ..., up to 9261 *cubes*, are available in Cubeland.

Your task is to count the number of ways to pay a given amount using cubic coins of Cubeland. For example, there are 3 ways to pay 21 *cubes*: twenty one 1 *cube* coins, or one 8 *cube* coin and thirteen 1 *cube* coins, or two 8 *cube* coin and five 1 *cube* coins.

## Input

Input consists of lines each containing an integer amount to be paid. You may assume that all the amounts are positive and less than 10000.

## Output

For each of the given amounts to be paid output one line containing a single integer representing the number of ways to pay the given amount using the coins available in Cubeland.

## Sample Input

```
10
21
77
9999
```

## Sample Output

```
2
3
22
440022018293
```

