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## Every change

P29230\_en

Segon Concurs de Programació de la FME (2005-05-05)

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Write a program such that, for every given natural number  $n$ , prints all the different ways to obtain  $n$  cents with the euro system of coins (1 cent, 2 cents, 5 cents, 10 cents, 20 cents, and 50 cents).

### Input

Input consists of a sequence of natural numbers  $1 \leq n \leq 50$ .

### Output

For every  $n$ , print all the ways to obtain  $n$  cents, each one in a different line. The numbers of each line must appear in nonincreasing order. The solutions for every  $n$  must appear in reverse lexicographical order. Print an empty line after the output for each case.

### Observation

A simple backtracking program that computes the result for every given  $n$  (even if repeated) is fast enough for this problem.

### Sample input

```
1
7
2
```

### Sample output

```
1
5 2
5 1 1
2 2 2 1
2 2 1 1 1
2 1 1 1 1 1
1 1 1 1 1 1 1

2
1 1
```

### Problem information

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