
Minimum change

P81629_en

Write a program that, given an amount of euros and cents, computes the minimum number of banknotes and coins needed to get that amount. There are coins of 1, 2, 5, 10, 20 and 50 cents and of 1 and 2 euros, and banknotes of 5, 10, 20, 50, 100, 200 and 500 euros.

Input

Input consists of two natural numbers: the number of euros e and the number of cents c . Assume $c < 100$.

Output

Print the number of banknotes and coins of each type that are needed to represent the amount of the input, so as to minimize the total number of banknotes and coins.

Sample input 1

9999 99

Sample output 1

```
Banknotes of 500 euros: 19
Banknotes of 200 euros: 2
Banknotes of 100 euros: 0
Banknotes of 50 euros: 1
Banknotes of 20 euros: 2
Banknotes of 10 euros: 0
Banknotes of 5 euros: 1
Coins of 2 euros: 2
Coins of 1 euro: 0
Coins of 50 cents: 1
Coins of 20 cents: 2
Coins of 10 cents: 0
Coins of 5 cents: 1
Coins of 2 cents: 2
Coins of 1 cent: 0
```

Sample input 2

0 78

Sample output 2

```
Banknotes of 500 euros: 0
Banknotes of 200 euros: 0
Banknotes of 100 euros: 0
Banknotes of 50 euros: 0
Banknotes of 20 euros: 0
Banknotes of 10 euros: 0
Banknotes of 5 euros: 0
Coins of 2 euros: 0
Coins of 1 euro: 0
Coins of 50 cents: 1
Coins of 20 cents: 1
Coins of 10 cents: 0
Coins of 5 cents: 1
Coins of 2 cents: 1
Coins of 1 cent: 1
```

Sample input 3

100 0

Sample output 3

Banknotes of 500 euros: 0
Banknotes of 200 euros: 0
Banknotes of 100 euros: 1
Banknotes of 50 euros: 0
Banknotes of 20 euros: 0
Banknotes of 10 euros: 0
Banknotes of 5 euros: 0
Coins of 2 euros: 0
Coins of 1 euro: 0
Coins of 50 cents: 0
Coins of 20 cents: 0
Coins of 10 cents: 0
Coins of 5 cents: 0
Coins of 2 cents: 0
Coins of 1 cent: 0

Problem information

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