Problem A. Too Rich

Time limit: 3s

Color of balloons: pink

You are a rich person, and you think your wallet is too heavy and full now. So you want to give me some money by buying a lovely pusheen sticker which costs p dollars from me. To make your wallet lighter, you decide to pay exactly p dollars by as many coins and/or banknotes as possible.

For example, if $p = 17$ and you have two \$10 coins, four \$5 coins, and eight \$1 coins, you will pay it by two \$5 coins and seven \$1 coins. But this task is incredibly hard since you are too rich and the sticker is too expensive and pusheen is too lovely, please write a program to calculate the best solution.

Input

The first line contains an integer T indicating the total number of test cases. Each test case is a line with 11 integers $p, c_1, c_5, c_{10}, c_{20}, c_{50}, c_{100}, c_{200}, c_{500}, c_{1000}, c_{2000}$, specifying the price of the pusheen sticker, and the number of coins and banknotes in each denomination. The number c_i means how many coins/banknotes in denominations of i dollars in your wallet.

- $1 \leq T \leq 20000$
- $0 \leq p \leq 10^9$
- $0 \leq c_i \leq 100000$

Output

For each test case, please output the maximum number of coins and/or banknotes he can pay for exactly p dollars in a line. If you cannot pay for exactly p dollars, please simply output '-1'.

Sample

standard input	standard output
3 17 8 4 2 0 0 0 0 0 0 0 100 99 0 0 0 0 0 0 0 0 0 2015 9 8 7 6 5 4 3 2 1 0	9 -1 36

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