

## 7202 Pay Day

You work for a mining company deep in the asteroid belt. Due to recent political instability in the outer system, employees have become distrustful of the Banking System and are demanding to be paid in cash. In order to do so you need a specific quantity of each denomination of currency.

Your job is to write a program which will calculate the quantity of each denomination needed to pay every employee their due — or face a bloody rebellion. Everyone expects to receive their pay using the largest denominations possible.

### Input

Your input consists of an arbitrary number of records, but no more than 100. Each record starts with a line containing a single integer  $m$ , with  $1 \leq m \leq 100$ , denoting the number of salaries to follow. The next line contains  $m$  integers  $s_i$  separated by spaces, subject to  $1 \leq s_i \leq 500000$ , representing the salaries of your  $m$  workers.

The denominations are the fixed set of coins with values 30030 2310 210 30 6 2 1.

The end of input is indicated by a line containing only the value '-1'.

### Output

For each input record, output the quantity of each denomination required. Keep in mind that employees want as many coins of the largest denomination possible, followed by the maximum of the next largest denomination possible, and so on until the smallest denomination is reached.

You must output a line formatted as

*denomination = quantity*

for each denomination (even if the quantity is zero), in the order they were specified. After each record, output a blank line.

### Sample Input

```
5
162 161 163 164 165
2
203236 300260
-1
```

### Sample Output

```
30030 = 0
2310 = 0
210 = 0
30 = 25
6 = 9
2 = 4
1 = 3

30030 = 15
2310 = 21
```

$$210 = 20$$

$$30 = 10$$

$$6 = 5$$

$$2 = 3$$

$$1 = 0$$