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Zero Sum

Consider the sequence of digits from 1 through *N* (where *N* ≤ 9) in increasing order: 1 2 3 ... *N*.

Now insert either a '+' for addition or a '-' for subtraction or a ' ' [blank] to run the digits together between each pair of digits (not in front of the first digit). Calculate the result of the expression and see if you get zero.

Write a program that will find all sequences of length *N* that produce a zero sum.

INPUT FORMAT

A single line with the integer *N* (3 <= *N* <= 9).

SAMPLE INPUT

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7
```

OUTPUT FORMAT

In ASCII order, show each sequence that can create 0 sum with a '+', '-', or ' ' between each pair of numbers. If there is no such sequence write 0.

SAMPLE OUTPUT

```
1+2-3+4-5-6+7
1+2-3-4+5+6-7
1-2 3+4+5+6+7
1-2 3-4 5+6 7
1-2+3+4-5+6-7
1-2-3-4-5+6+7
```