

Problem Description

Consider an N-by-N two-dimensional map. On the map, use the symbol '+' to draw a cross that is centered at the location (ROW, COLUMN) and with a radius of R. Mark the center of the cross as 'S' and fill the rest parts of the map with the symbol '-'. For example, the following is a 7-by-7 map, where the cross is centered at (3, 4) and with a radius of 2. That is, we have N=7, ROW=3, COLUMN=4, and R=2.

```
---+---  
---+---  
-++S+-  
---+---  
---+---  
-----  
-----
```

Note that, in some cases, the cross might be close to the border of the map and therefore only a part of the cross can be shown on the map. For example,

```
---+-  
-++S+  
---+-  
---+-  
-----
```

Input

The first line is an integer N ($1 \leq N \leq 10$) denoting the size of the map.

The second line contains two integers ROW and COLUMN ($1 \leq \text{ROW}, \text{COLUMN} \leq 10$) denoting the location of the cross center.

The last line is an integer R ($1 \leq R \leq 10$) denoting the radius.

Output

The N-by-N map with the specified cross on it, displayed in N lines. Each line is ended with a newline character '\n'.

Sample Input

5
2 4
2

Sample Output

---+-
-++S+
---+-
---+-
