

## Problem N

### Checkerboard

Time limit: 1 second



An  $R$ -by- $C$  grid of squares is to be colored in a checkerboard style. The board will be filled with rectangles made up of the grid squares. There should be  $A$  rectangles vertically and  $B$  rectangles horizontally. All rectangles in row  $i$  should be  $a_i$  squares high; all rectangles in column  $j$  should be  $b_j$  squares wide. The top-left rectangle should be black and two adjacent rectangles that share a side should be colored differently.

Print the checkerboard.

### Input

The first line will contain four integers,  $R$ ,  $C$ ,  $A$ , and  $B$  with  $1 \leq A \leq R \leq 50$  and  $1 \leq B \leq C \leq 50$ . The next  $A$  lines will each contain a single positive integer  $a_i$ ; the sum of the  $a_i$  values will be  $R$ . The next  $B$  lines will each contain a single positive integer  $b_i$ ; the sum of the  $b_i$  values will be  $C$ .

### Output

Print the required checkerboard. It should have  $R$  lines each with a string of length  $C$  containing only the characters 'B' and 'W'.



## ICPC Pacific Northwest Regional Contest

### Examples

#### Sample Input 1

```
6 5 3 2
1
2
3
3
2
```

#### Sample Output 1

```
BBBWW
WWWBB
WWWBB
BBBWW
BBBWW
BBBWW
```

#### Sample Input 2

```
4 4 2 2
1
3
3
1
```

#### Sample Output 2

```
BBBW
WWWB
WWWB
WWWB
```