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Matrix

Time Limit: 2000/1000 MS (Java/Others) Memory Limit: 332768/332768 K (Java/Others)
Total Submission(s): 0 Accepted Submission(s): 0

Problem Description

Samwell Tarly is learning to draw a magical matrix to protect himself from the White Walkers.

the magical matrix is a matrix with n rows and m columns, and every single block should be painted either black or white.

Sam wants to know how many ways to paint the matrix, satisfied that the final matrix has at least A rows, B columns was painted completely black. Cause the answer might be too big, you only need to output it modulo 998244353.

Input

There might be multiple test cases, no more than 5. You need to read till the end of input.

For each test case, a line containing four integers n, m, A, B .

$1 \leq n, m, A, B \leq 3000$.

Output

For each test case, output a line containing the answer modulo 998244353.

Sample Input

```
3 4 1 2
```

Sample Output

```
169
```

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Hangzhou Dianzi University Online Judge 3.0
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