

international collegiate programming contest INDONESIA NATIONAL CONTEST INC 2023



Problem L Numbers Combination

You are given two integers, N and K. Determine the number of sequences of integers (A_1, A_2, \ldots, A_N) that satisfy

- $1 \le A_i \le i$ for $1 \le i \le N$, and
- $A_1 + A_2 + \dots + A_N = K.$

Since the answer can be very large, calculate the answer modulo 998 244 353.

Input

Input consists of two integers N K ($1 \le N \le 100\,000; N \le K \le 200\,000$).

Output

Output in a line an integer representing the answer modulo 998 244 353.

Sample Input #1

35

Sample Output #1

2

Explanation for the sample input/output #1

The sequences that satisfy the requirements are (1, 1, 3) and (1, 2, 2).

Sample Input #2

56

Sample Output #2

4

Explanation for the sample input/output #2

The sequences that satisfy the requirements are: (1, 1, 1, 1, 2), (1, 1, 1, 2, 1), (1, 1, 2, 1, 1), and (1, 2, 1, 1, 1).

Sample Input #3

77





Sample Output #3

1

Explanation for the sample input/output #3

The only sequence that satisfy the requirements is (1, 1, 1, 1, 1, 1, 1).

Sample Input #4

1 2

Sample Output #4

0

Explanation for the sample input/output #4

There are no sequences that satisfy the requirements.

Sample Input #5

Sample Output #5

270258410