

Introduction to Computers and Programming

Extra

2024/01/02

1. Problems

1.1 Throwing Cards Away

Given a deck of cards with numbers from 1 to n arranged from top to bottom, a total of m draws will be conducted. In each draw, the top card is removed, and its number is outputted. Subsequently, the removed card is placed at the bottom of the deck.

Input

The input will consist two integers n and m ($1 \leq n, m \leq 100$).

Output

Please print out the sequence of the discarded cards. Every number is followed by one space.

Example 1:

Input

7 7

Output

1 3 5 7 4 2 6

Example 2:

Input

9 7

Output

1 3 5 7 9 4 8