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## Practice Arena

Practice problems aimed to improve your coding skills.

- PRACTICE-02 SCAN-PRINT
- ► PRACTICE-03\_TYPES
- LAB-PRAC-02 SCAN-PRINT
- LAB-PRAC-01
- PRACTICE-04 COND
- **BONUS-PRAC-02**
- LAB-PRAC-03 TYPES
- PRACTICE-05 COND-LOOPS
- LAB-PRAC-04 COND
- LAB-PRAC-05 CONDLOOPS
- PRACTICE-07\_LOOPS-ARR
  - Supersized Sum
  - 2 Degree of Compositionality
  - 2 Reverse the Stream
  - The Better Cricketer
  - Palindromes
- LAB-PRAC-06 LOOPS
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- **►** LABEXAM-PRAC-01\_MIDSEM
- PRACTICE-09\_PTR-MAT
- LAB-PRAC-08 ARR-STR
- PRACTICE-10\_MAT-FUN
- LAB-PRAC-09\_PTR-MAT
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- PRACTICE-11\_FUN-PTR
- LAB-PRAC-11\_FUN-PTR
- LAB-PRAC-12 FUN-STRUC
- **►** LABEXAM-PRAC-02\_ENDSEM
- **☎** LAB-PRAC-13\_STRUC-NUM
- LAB-PRAC-14\_SORT-MISC

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## Supersized Sum PRACTICE-07\_LOOPS-ARR

This question does not require the use of arrays. Try solving it without using arrays.

In the first line, you will be given two strictly positive long numbers M and N. After that, you will be given N long integers, say x1, x2, ... xN. All these integers will be strictly positive. You have to output the value of (x1 + x2 + ... + xN) % M.

This question seems deceptively simple since you might think all you need to do is to maintain a running sum and then take the remainder with M. However, here is the twist. Even though the final output will definitely fit inside a long variable (since the final output is definitely less than M since it is a remainder with M which is itself a long variable), the sum of all the N numbers may not fit inside a long variable at all - it may be much bigger than the limit of long variables!

**Hint** Use the following property of remainders. For any three strictly positive integers (or longs) p, q, r, we always have (p + q) % r = ((p % r) + (q % r)) % r

**¥**¶ Start Solving! (/editor/practice/6105)