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
- LAB-PRAC-06_LOOPS
  - Fill in the Square
  - Pretty Numbers
  - Block Cipher
  - The Fibonacci Facade
  - Stream AM GM
  - Int on Int
  - Bejewelled Brooch
  - Mobile Mixup
  - Primes are in C
  - Towering Numbers
  - A Run of One
  - Where are the primes-
- LAB-PRAC-07_LOOPS-ARR
- LABEXAM-PRAC-01_MIDSEM
- PRACTICE-09_PTR-MAT
- LAB-PRAC-08_ARR-STR
- PRACTICE-10_MAT-FUN
- LAB-PRAC-09_PTR-MAT
- LAB-PRAC-10_MAT-FUN
- 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

Int on Int

LAB-PRAC-06_LOOPS

Int on Int [20 marks]

Problem Statement
You will be given two **non-negative integers** N, k, with the guarantee that both are not zero simultaneously. Your job is very simple. In the first line, print the sum 1^k + 2^k + 3^k + 4^k + 5^k. In the second line, print the sum 1^k + 2^k + ... + N^k. We want your output to be printed as an integer with all its digits intact - i.e. no approximations.

Caution

1. Be careful about extra/missing lines and extra/missing spaces.
2. Even though N, k will fit inside int variables, use **long variables and long typecasts** in your calculations.
3. Remember, datatypes like float and double can distort the numbers they store inside them.
4. For N = 0, the summation 1^k + 2^k + ... + N^k is empty and is value should be printed as 0.

INPUT:
N k
OUTPUT:
1^k + 2^k + 3^k + 4^k + 5^k
1^k + 2^k + ... + N^k

EXAMPLE:
INPUT
1 1

OUTPUT:
15
1

Grading Scheme:
Total marks: **[20 Points]**

There will be partial grading in this question. There are two lines in your output. Printing each line correctly, in the correct order, carries 50% weightage. Each visible test case is worth 2 points and each hidden test case is worth 4 points. There are 2 visible and 4 hidden test cases.

Please remember, however, that when you press Submit/Evaluate, you will get a green bar only if all parts of your answer are correct. Thus, if your answer is only partly correct, Prutor will say that you have not passed that test case completely, but when we do autograding afterwards, you will get partial marks.

Start Solving! (/editor/practice/6115)