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
  - Forgetful Mr C
  - Rich Mr C
  - Perfect Numbers
  - Mr C builds a Calculator
  - Love for Primes
  - Tryst with Taylor
  - Mr C is very busy
  - Fabulous Fibonacci
  - Digit Debacle
  - May the fourth be with you
  - Phone a friend
  - The legend of Chess
- PRACTICE-07_LOOPS-ARR
- LAB-PRAC-06_LOOPS
- 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

Mr C builds a Calculator

LAB-PRAC-05_CONDLOOPS

Mr C builds a Calculator [10 marks]

Problem Statement
Mr. C is fed up of making calculation mistakes in his CHM101 lab assignments and decides to build a scientific calculator to help him do calculations accurately. He needs some of the basic arithmetic and trigonometric functions for the lab. Help Mr C build this calculator.

You will be given an operation (e.g. addition, sin etc) represented using a code given below, followed by the inputs for that operation. Write a program to read the operation as well as the inputs and then perform the operation on those inputs. Your answers should always be printed rounded off to 4 decimal places.

Operation Code	Operation Symbol	Input1	Input2	Output
1	+	a	b	a+b
2	-	a	b	a-b
3	*	a	b	a*b
4	/	a	b	a/b
5	pow	a	b	pow(a,b)
6	sin	a		sin(a)
7	cos	a		cos(a)
8	fabs	a		fabs(a)

Caution

1. Note that the input numbers **may be non-integer**
2. It is advised that you use double datatype and double typecasts in your code
3. Note that some of the above operations are binary e.g. * and pow, whereas others are unary e.g. sin, fabs. If the operation is a unary operation, we will supply you only one number, if the operation is a binary operation, we will supply you two numbers.
4. Be careful about extra/missing lines and extra/missing spaces.

EXAMPLE:
INPUT
1 2 3

OUTPUT:
5.0000

Note 1 stands for addition, so we added the two numbers 2 and 3 and output it rounded to four decimal places as 5.000

Grading Scheme:
Total marks: **[10 Points]**

There will be no partial grading in this question. An exact match will receive full marks whereas an incomplete match will receive 0 points. Please be careful of missing/extra spaces and missing/lines (take help of visible test cases). Each visible test case is worth 1 point and each hidden test case is worth 2 points. There are 2 visible and 4 hidden test cases.

Start Solving! (/editor/practice/6080)