Practice Arena

Practice problems aimed to improve your coding skills.

- PRACTICE-02_SCAN-PRINT
- PRACTICE-03_TYPES
- LAB-PRAC-02_SCAN-PRINT
  - Mr C goes on a diet
  - Permute Password
  - Escapes around Tutors
  - Amusing Fractions
  - P and C
  - Build a Rhombus
  - Developing Interest at IITK
  - Pick your Choice
  - Lego Safe
  - Race Car
  - Reverse Gear
  - Numerical Flowers
- 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
- 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 goes on a diet

LAB-PRAC-02_SCAN-PRINT

Mr C goes on a diet [20 marks]

Problem Statement
Some students told Mr C that he is getting a bit overweight so he decided to go on a diet. To do so, he wants to find the total surface area and volume of the glass he uses to measure his food. His glass is a cylinder with radius r and height h. Help him find our these two quantities.

Your code should take 2 integers as input, the first is radius, the second is height, and then calculate and output the total surface area and volume of the cylinder in two separate lines. Don't forget the high-school formulae for the total surface area and volume of a cylinder :)

Caution

1. You need only output the integral part of the actual output i.e. if the actual volume is 100.56, output 100 and if the actual total surface area is 98.04, output 98.
2. For this question, you may take the value of pi as 22/7.
3. Do not use any datatype other than int.
4. Do not use any library other than stdio.h

HINTS:

1. Visible test case number 1 is there to confirm if you are giving output in the correct format or not. Be careful about extra spaces and lines.
2. Visible test case number 2 is there to check if you are performing integer arithmetic operations properly or not.

INPUT:
radius height

OUTPUT:
area
volume

EXAMPLE:
INPUT
1 2
OUTPUT:
15
6

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

There will be partial grading in this question. In each test case, 50% marks are for giving the correct

total surface area and 50% marks will be for giving the correct volume i.e. if a test case is worth 2 points, 1 point is for correct total surface area and 1 point for correct volume.

Please remember, however, that when you press Submit/Evaluate, you will get a green bar only if both answers are correct. Thus, if your surface area is correct but volume is incorrect, Prutor will say that you have not passed that test case completely, but when we do autograding afterwards, you will get 50% partial marks.

Each visible test case is worth 2 points and each hidden test case is worth 4 points.

🍴 Start Solving! (/editor/practice/5949)