

## Lab Evaluation

1. Write a C program to print 4 data type values, input taken from users.

Input samples	Output samples
4 5.5678 10.543567 a	Integer = 4 Float = 5.56 Double = 10.5435 Character = a

2. There are two best friends Anik and Asif. They were very good at math. Nobody can't lose them at mathematics quiz. Today they went for a mathematical quiz and they got this equation. They have to solve this equation to get the first rank. But they don't know how to solve it.

He needs your help to solve the equation. Now you write a program to solve this equation to help them.

The equation is : 
$$\frac{(A+B)(A-B)+(A\%B)}{AB}$$

Input samples	Output samples
10 5	Result = 1.50

3. Faruk is a brilliant student. But he is weak in mathematics, his teacher gave him a mathematical equation  $1+2+3+4+\dots+n$  to find the total summation of this equation. He tried his best to find the solution but he was unsuccessful.

Now he needs your help to find the summation of this equation.

**Input:**

The input taken one integer value which is  $n$ .

**Output:**

The output was the total summation of the equation.

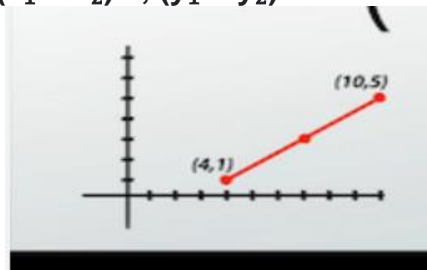
**Note:**

Don't forget to print the new line at the end of the code.

Input samples	Output samples
5	Result: 15
6	Result: 21

4. Your best friend Pavel tries to find a middle point for a particular math problem. He needs your help to find the middle point. Now you have to write a program to find the middle point.

you have coordinates  $(x_1, y_1)$  and  $(x_2, y_2)$ . The midpoint of these coordinates is determined by  $(x_1 + x_2)/2, (y_1 + y_2)/2$



Input samples	Output samples
4 1 10 5	(7,3)

5. Write a C program to convert Temperature from Celsius to Fahrenheit.

formula:  $F = (C \times 9/5) + 32$

Input samples	Output samples
Input temperature in Celsius : 26	Temperature in Fahrenheit : 78.8

5. Write a C program to calculate the area of a circle.

Formula:  $\text{area} = \pi * r * r$ ;

Input:

**Input a single integer number r for radius of circle.**

Output:

**The output will be the area of the given circle.**

Input samples	Output samples
Input r: 5	Circle Area : 78.54

6. Write a C program to calculate the area of a triangle.

Formula:  $\text{Area} = 0.5 * \text{height} * \text{weight}$ ;

Input

**There will be two integer inputs, input height for h and weight for w.**

Output

**Print the area of the triangle.**

Input samples	Output samples
Input h: 5 Input w: 2	Triangle Area : 5.00

7. Three integers a, b and c are given. Print how many numbers are divisible from 1 to c [1,c] by a or b . It is granted that a and b are always coprime. Formula:

Input:

There will be tree integer inputs a, b and c.

Output:

Print how many numbers are divisible by a or b in [1,c]

Input samples	Output samples
a = 3 b = 5 c = 20	9