Some Practice Problems

using

scanf()

Problem 1

Description: Write a C program to take an integer (x) number as input and display it. Here -100000< x < 100000

Sample Input:
10

Sample Output:
10

Sample Input:
12

Sample Output:
12

Problem 2

Description: Write a C program to take a floating point (x) number as input and display it.
Here -100000< x < 100000

Sample Input:
56.212322

Sample Output:
56.212322

Sample Input:
1020.098345

Sample Output:
1020.098345

Problem 3

Description: Write a C program to take a character(c) as input and display it.

Sample Input:
a

Sample Output:
a

Sample Input:
9

Sample Output:
9

Problem 4

Description: Write a C program to take a character(c) as input and display its ASCII value.

Sample Input:
A

Sample Output:
65

Sample Input:
0

Sample Output:
48

Problem 5

Description: Write a C program to take two integer number (x and y) as input and display the sum of that two numbers.

Sample Input:
10 25

Sample Output:
35

Sample Input:
-10 50

Sample Output:
40

Problem 6

Description: Write a C program to take two integer number (x and y) as input and display the value of x-y.

Sample Input:
10 25

Sample Output:
-15

Sample Input:
10 5

Sample Output:
5

Problem 7

Description: Write a C program to take two integer number (x and y) as input and display the value of x multiplied by y.

Sample Input:
10 25

Sample Output:
250

Sample Input:
10 -1

Sample Output:
-10

Problem 8

Description: Write a C program to take two integer number (x and y) as input and display the value of x modulo y (x%y). [Modulo means remainder]

Sample Input:
36 11

Sample Output:
3

Sample Input:
125 5

Sample Output:
0

Problem 9

Description: Write a C program to take two integer number (x and y) as input and display the output in the given format.

Sample Input:
10 3

Sample Output:
10 + 3 = 13
10 - 3 = 7
10 x 3 = 30
10 / 3 = 3
10 % 3 = 1

Sample Input:
5 2

Sample Output:
5 + 2 = 7
5 - 2 = 3
5 x 3 = 15
5 / 3 = 1
5 % 3 = 2

Problem 10

Description: Write a C program to take two integer number (x and y) as input and display the output in the given format.

Sample Input:
102 30

Sample Output:
30 102

Sample Input:
130 -121

Sample Output:
-121 130

Problem 11

Description: Given the base and height of a triangle, determine its area.

Sample Input:
4 6

Sample Output:
12

Sample Input:
11 8

Sample Output:
44

Area of triangle = (1/2) * base * height

Problem 12

Description: Given the radius(r) of a circle, determine its area.

Sample Input:
12

Sample Output:

Sample Input:
10

Sample Output:

Area of circle = Pi * r^2

Problem 13

Description: Given three edges (a, b and c) of a triangle, determine its area.

Sample Input:
5 6 10

Sample Output:

Sample Input:
3 6 8

Sample Output:

$$area = \sqrt{s(s-a)(s-b)(s-c)}$$
Where: $s = \frac{a+b+c}{2}$

Problem 14

Description: Given the radius(r) and height(h) of a cylinder, determine its volume.

Sample Input:
5 6

Sample Output:

Sample Input:
3 6

Sample Output:

Volume = Pi * r^2 * h

Problem 15

Description: Given the radius(r) of a sphere, determine its volume.
[N.B. Print the answer up to two decimal points.]

Sample Input:
5

Sample Output:

Sample Input:
12

Sample Output:

Volume =(4/3) * Pi * r^3

Problem 16

Description: Write a program that takes two numbers (a and b) as input and swaps those two numbers.
Here, $1 <= a,b <= 10^9$

Explanation:
Suppose a =10, b=5

After performing the swap operation the values of a and b will be changed as follows

a= 5, b= 10

Thank You

Instructor Information:

Puja Chakraborty
Lecturer
Department of Computer Science and Engineering
East West University
Dhaka, Bangladesh
Email: puja.chakraborty@ewubd.edu