

Ex.no : 1

Date : 4.10.2024

**Objective**

This is a simple challenge to help you practice printing to stdout.

We're starting out by printing the most famous computing phrase of all time! In the editor below, use either `printf` or `cout` to print the string ***Hello, World!*** to stdout.

**Input Format**

You do not need to read any input in this challenge.

**Output Format**

Print ***Hello, World!*** to stdout.

**Sample Output**

Hello, World!

**PROGRAM:**

```
1 #include<stdio.h>
2 int main()
3 {
4     printf("Hello, World!");
5     return 0;
6 }
```

	Expected	Got	
✓	Hello, World!	Hello, World!	✓

Passed all tests! ✓

Ex.no : 2

Date : 4.10.2024

To take a single character **ch** as input, you can use `scanf("%c", &ch);` and `printf("%c", ch)` writes a character specified by the argument `ch` to `stdout`:

```
char ch;  
scanf("%c", &ch);  
printf("%c", ch);
```

This piece of code prints the character **ch**.

**Task**

You have to print the character, **ch**.

**Input Format**

Take a character, **ch** as input.

**Output Format**

Print the character, **ch**.

**PROGRAM:**

```
1 | #include<stdio.h>  
2 | int main()  
3 | {  
4 |     char ch;  
5 |     scanf("%c",&ch);  
6 |     printf("%c",ch);  
7 |     return 0;  
8 | }
```

	Input	Expected	Got	
✓	c	c	c	✓

Passed all tests! ✓

**Objective**

The fundamental data types in c are int, float and char. Today, we're discussing int and float data types.

The printf() function prints the given statement to the console. The syntax is printf("format string",argument\_list);. In the function, if we are using an integer, character, string or float as argument, then in the format string we have to write %d (integer), %c (character), %s (string), %f (float) respectively.

The scanf() function reads the input data from the console. The syntax is scanf("format string",argument\_list);. For ex: The scanf("%d",&number) statement reads integer number from the console and stores the given value in variable **number**.

To input two integers separated by a space on a single line, the command is scanf("%d %d", &n, &m), where **n** and **m** are the two integers.

**Task**

Your task is to take two numbers of **int data type**, two numbers of float data type as input and output their sum:

1. Declare **4** variables: two of type int and two of type float.
2. Read **2** lines of input from stdin (according to the sequence given in the 'Input Format' section below) and initialize your **4** variables.

3. Use the + and - operator to perform the following operations:
  - o Print the sum and difference of two int variable on a new line.
  - o Print the sum and difference of two float variable rounded to one decimal place on a new line.

**Input Format**

The first line contains two integers.

The second line contains two floating point numbers.

**Constraints**

- $1 \leq \text{integer variables} \leq 10^4$
- $1 \leq \text{float variables} \leq 10^4$

**Output Format**

Print the sum and difference of both integers separated by a space on the first line, and the sum and difference of both float (scaled to **1** decimal place) separated by a space on the second line.

**Sample Input**

10 4  
4.0 2.0

**Sample Output**

14 6  
6.0 2.0

**Explanation**

When we sum the integers **10** and **4**, we get the integer **14**. When we subtract the second number **4** from the first number **10**, we get **6** as their difference.

When we sum the floating-point numbers **4.0** and **2.0**, we get **6.0**. When we subtract the second number **2.0** from the first number **4.0**, we get **2.0** as their difference.

**Answer:** (penalty regime: 0 %)

**PROGRAM:**

```

1 #include<stdio.h>
2 int main()
3 {
4     int a,b;
5     float c,d;
6     scanf("%d %d",&a,&b);
7     scanf("%f %f",&c,&d);
8     printf("%d %d\n",a+b,a-b);
9     printf("%.1f %.1f",c+d,c-d);
10    return 0;
11 }
```

	Input	Expected	Got	
✓	10 4 4.0 2.0	14 6 6.0 2.0	14 6 6.0 2.0	✓
✓	20 8 8.0 4.0	28 12 12.0 4.0	28 12 12.0 4.0	✓

Passed all tests! ✓