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Week-01-Overview of C, Constants, Variables and Data Types

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.

Answer: (penalty regime: 0 %)

```
#include <stdio.h>
int main(){
    printf("Hello, World!");
    return 0;
}
```

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

Passed all tests! <

Objective

This challenge will help you to learn how to take a character, a string and a sentence as input in C.

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 char to stdout:

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

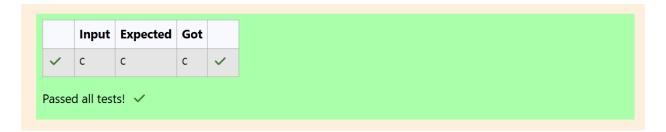
This piece of code prints the character *ch*.

Task

You have to print the character, ch.

Answer: (penalty regime: 0 %)

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



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 \mathbf{n} and \mathbf{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.

Answer: (penalty regime: 0 %)

```
#include <stdio.h>
1
   int main ()
2
3 ₹ {
        int a;
4
        int b;
5
6
        float c;
7
       float d;
       scanf("%d%d",&a,&b);
8
       printf("%d %d",a+b,a-b);
9
       scanf("%f%f",&c,&d);
10
       printf("\n%0.1f %0.1f",c+d,c-d);
11
       return 0;
12
   |}
13
```

	Input	Expected	Got	
~	10 4 4.0 2.0	14 6 6.0 2.0	14 6 6.0 2.0	~
~		28 12 12.0 4.0	28 12 12.0 4.0	~

Passed all tests! <