

WEEK 01

Question 1:

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     printf("Hello, World!");
4     return 0;
5 }
```

Output

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

Passed all tests! ✓

Question 2:

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

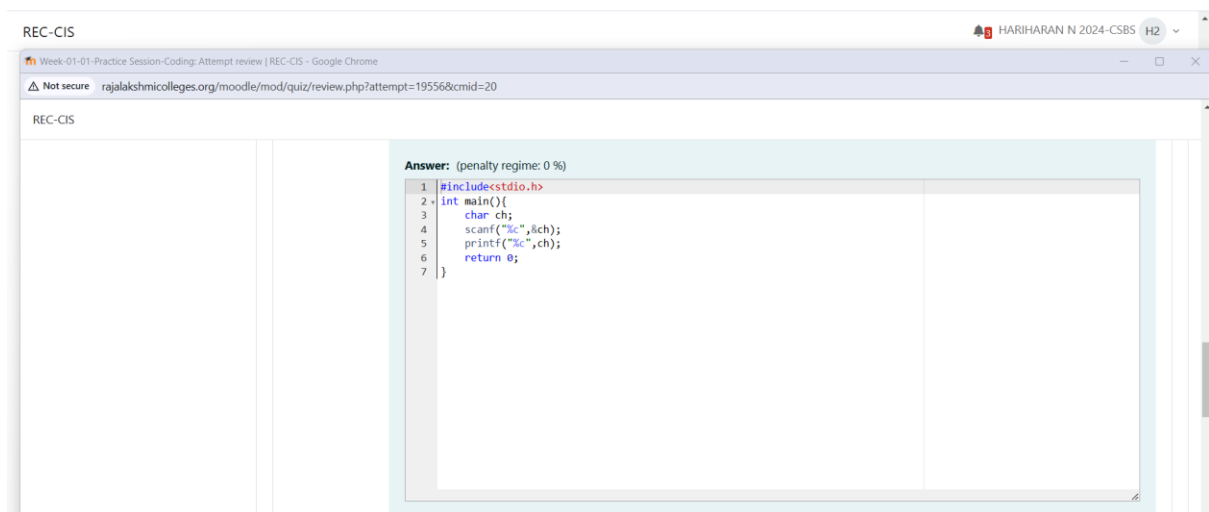
Input Format

Take a character, `ch` as input.

Output

Print the character, `ch`.

Program:



The screenshot shows a web browser window with the address bar displaying "Week-01-01-Practice Session-Coding: Attempt review | REC-CIS - Google Chrome". The page content shows a quiz review for "REC-CIS". A code editor displays the following C program:

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

Below the code editor, the text "Answer: (penalty regime: 0 %)" is visible.

Output

	Input	Expected	Got	
✓	C	C	C	✓

Passed all tests! ✓

Question 3:

Declare 4 variables: two of type int and two of type float. Read 2 lines of input from stdin (according to the sequence given in the 'Input Format' section below) and initialize your 4 variables. Use the + and operator to perform the following operations: Print the sum and difference of two int variable on a new line. 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.

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.

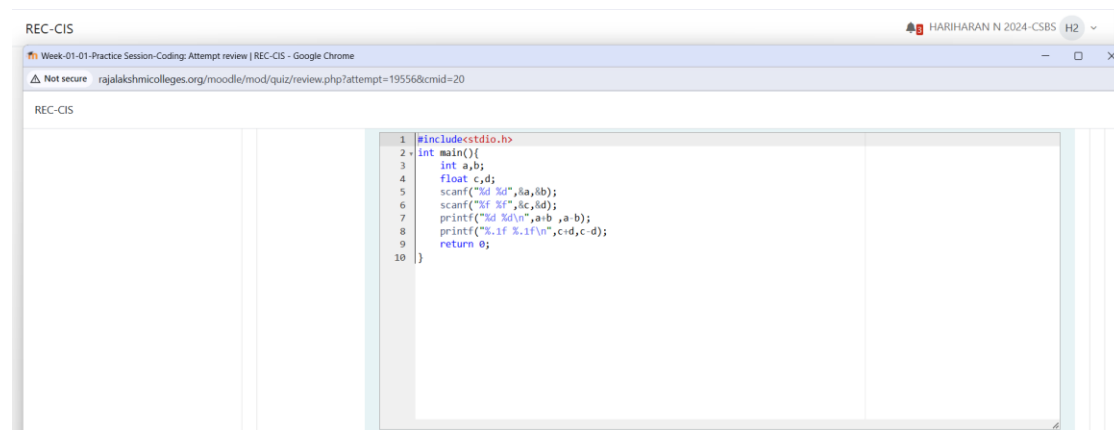
Sample Input:

```
10 4
4.0 2.0
```

Sample Output

```
14 6
6.0 2.0
```

Program:



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

Output

	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! ✓

Question 4:

Write a program to input a name (as a single character) and marks of three tests as m1, m2, and m3 of a student considering all the three marks have been given in integer format. Now, you need to calculate the average of the given marks and print it along with the name as mentioned in the output format section. All the test marks are in integers and hence calculate the average in integer as well. That is, you need to print the integer part of the average only and neglect the decimal part.

Input format:

Line 1: Name(Single character) Line 2: Marks scored in the 3 tests separated by single space.

Output format:

First line of output prints the name of the student.

Second line of the output prints the average mark.

Sample Input 1:

A

346

Sample Output 1:

A

4

Program:

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

Output

	Input	Expected	Got	
✓	A 3 4 6	A 4	A 4	✓
✓	T 7 3 8	T 6	T 6	✓
✓	R 0 100 99	R 66	R 66	✓

Passed all tests! ✓

Question 5:

To read a data type, use the following syntax: `scanf("format_specifier", &val)`.

To print a data type, use the following syntax: `printf("format_specifier", val)`

Input Format:

Input consists of the following space-separated values: int, long, char, float, and double, respectively.

Output Format:

Print each element on a new line in the same order it was received as input. Note that the floating point value should be correct up to 3 decimal places and the double to 9 decimal places.

Program:

```
1 #include<stdio.h>
2 int main(){
3     int num;
4     long number;
5     char ch;
6     float frac;
7     double longfrac;
8     scanf("%d %ld %c %f %lf",&num,&number,&ch,&frac,&longfrac);
9     printf("%d",num);
10    printf("\n%ld",number);
11    printf("\n%c",ch);
12    printf("\n%.3f",frac);
13    printf("\n%.9lf",longfrac);
14    return 0;
15 }
```

Output

	Input	Expected	Got	
✓	3 12345678912345 a 334.23 14049.30493	3 12345678912345 a 334.230 14049.304930000	3 12345678912345 a 334.230 14049.304930000	✓
Passed all tests! ✓				

Question 6:

Write a program to print the ASCII value and the two adjacent characters of the given character.

Sample Input:

E

Sample Output:

69

D F

Program:

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

Output

	Input	Expected	Got	
✓	E	69 D F	69 D F	✓

Passed all tests! ✓