

Challenge 2: Count the Digits in a Number Using Recursion

Let's test your knowledge by solving a challenge in this lesson.

We'll cover the following ^

- Problem statement
 - Sample input
 - Sample output
- Coding exercise

Problem statement

In this challenge, your task is to write a recursive function `count_digits`. In the function parameter, you will pass the value of type `int`, and function will return an `int` value in the output.

```
int count_digits ( int number );
```

Your function should count the total number of digits in a `number` and return the number of digits in output. Your solution should work for both positive and negative values, including 0.

Sample input

```
count_digits (2436);  
count_digits (1);  
count_digits (-1234);
```

Sample output

```
digits = 4  
digits = 1  
digits = 4
```

Coding exercise

Before diving directly into the solution, first, try to solve it yourself, and then check if your code passes all the test cases. If you get stuck, you can always see the given solution.

 Your function name should be `count_digits`.

 Please write a recursive solution to the problem.

Good Luck! 

```
/* Write your recursive function count_digits here
The function should take the value of type int in its input parameters
and return int value in the output*/
```

```
int count_digits(int number) {

    return 0;
}
```



 If you have solved the problem, congratulations!

In case you are stuck, let's go over the solution review in the next lesson.