



Challenge 2: Count the Digits in a Number Using Recursion

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#

Your task is to write a recursive function <code>count_digits</code>. In the function parameter, you will pass the value of type <code>int</code>, and function will return an <code>int</code> value in the output.

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

Your function should count the total number of digits in a <code>number</code> 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, try to solve it yourself. Then, check if your code passes all the test cases.

Your function name should be count_digits.

Please write a recursive solution to the problem.

Good luck! 👍

```
1 /* Write your recursive function count_digits here
2 The function should take the value of type int in its input parameters
3 and return int value in the output*/
4
5 int count_digits(int number) {
6
7 return 0;
8 }
```



If you have solved the problem, congratulations!

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

