

# Challenge 1: Calculate the Power of a Number Recursively

Let's test our 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 `power`. In the function parameter, you will pass `base`, and the `exponent` of type `int` and function will return an `int` value in the output.

```
int power ( int base , int exponent )
```

—

[]

Your function should calculate the base raised to the power exponent recursively and return the result in the output.

### Sample input #

```
power (2 , 3);
```

### Sample output #

```
8
```

## 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 **power** .

 Please write a recursive solution to this problem.

Good Luck! 

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

int power (int base , int exponent ) {

    return ;
}
```



 If you have solved the problem, congratulations!

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