

<u>Subject</u>

1 Solution

Additional Resources (3)

# Quest06

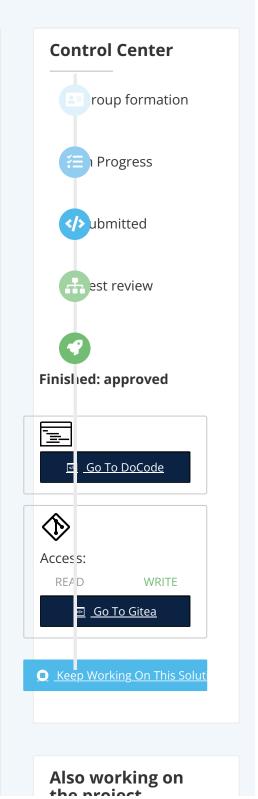
Remember to git add && git commit && git push each exercise!

We will execute your function with our test(s), please DO NOT PROVIDE ANY TEST(S) in your file

For each exercise, you will have to create a folder and in this folder, you will have additional files that contain your work. Folder names are provided at the beginning of each exercise under submit directory and specific file names for each exercise are also provided at the beginning of each exercise under submit file(s).

Quest06	My Iterative Pow
Submit directory	ex00
Submit file	my_iterative_pow.c

### **Description**



```
2 ^ 2 => 4
2 ^ 3 => 8
2 ^ 4 => 16
```

Let's create a function to calculate the pow of a number!

Create an iterated function that returns the value of a power applied to a number. An power lower than 0 returns 0.

Overflows don't have to be handled.

First parameter is the number, second parameter is the power You have to use a loop (for/while/...) to perform this exercise

### Function prototype (c)

```
/*
    **
    ** QWASAR.IO -- my_iterative_pow
    **
    ** @param {int} param_1
    ** @param {int} param_2
    **
    ** @return {int}
    **
    */

int my_iterative_pow(int param_1, int param_2)
    {
}
```

#### Example 00

```
Input: 2 && 2
Output:
Return Value: 4
```

#### Example 01

```
Input: 2 && 3
Output:
Return Value: 8
```











lucas v medina alimbo abdura i <u>t</u> ev a hm o









<u>barato</u> <u>toirov</u> <u>erkinov</u> <u>vusaro</u> <u>v\_b</u> <u>s</u> <u>d</u> <u>v\_d</u>

# Just finished





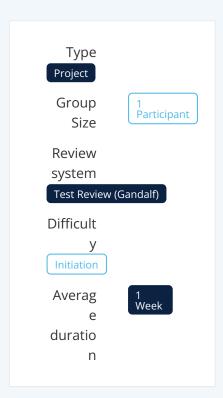




<u>ahmur xolxoja ergash atabek</u> <u>ato x y f ev a ov a</u>



<u>sobirjo</u> <u>n\_h</u>



Project's Metadata

Input: 2 && 4

Output:

Return Value: 16

Quest06	My Recursive Pow
Submit directory	ex01
Submit file	my_recursive_pow.c

### **Description**

Let's create a function to calculate the pow of a number!

Create an iterated function that returns the value of a power applied to a number. An power lower than 0 returns 0.

Overflows don't have to be handled.

First parameter is the number, second parameter is the power You have to use the recursive method to perform this exercise. While / for / any loop are forbidden.

# Function prototype (c)

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Project

id: 37

name: quest06

visible: True

```
/*
    **
    ** QWASAR.IO -- my_recursive_pow
    **
    ** @param {int} param_1
    ** @param {int} param_2
    **
    ** @return {int}
    **
    */

int my_recursive_pow(int param_1, int param_2)
    {
}
```

Input: 2 && 2
Output:

Return Value: 4

### Example 01

Input: 2 && 3
Output:

Return Value: 8

### Example 02

Input: 2 && 4

Output:

Return Value: 16

#### Tip

Google the following: recursive programming

Quest06	My Iterative Factorial
Submit directory	ex02
Submit file	my_iterative_factorial.c

### **Description**

```
2! => 2 x 1 => 2
3! => 3 x 2 x 1 => 6
4! => 4 x 3 x 2 x 1 => 24
```

Let's create a function to calculate the **factorial** of a number!

Create an iterated function that returns a number. This number is the result of a factorial operation based on the number given as a parameter.

If there's an error, the function should return 0.

You have to use a loop (for/while/...) to perform this exercise

# Function prototype (c)

```
/*
    **
    ** QWASAR.IO -- my_iterative_factorial
    **
    ** @param {int} param_1
    **
    ** @return {int}
    **
    */

int my_iterative_factorial(int param_1)
    {
}
```

#### Example 00

Input: 2
Output:

Return Value: 2

Input: 3
Output:

Return Value: 6

### Example 02

Input: 4
Output:

Return Value: 24

Quest06	My Recursive Factorial
Submit directory	ex03
Submit file	my_recursive_factorial.c

# **Description**

Let's create a function to calculate the **factorial** of a number!

Create an iterated function that returns a number. This number is the result of a factorial operation based on the number given as a parameter.

If there's an error, the function should return 0. You have to use the recursive method to perform this exercise. While / for / any loop are forbidden.

# Function prototype (c)

```
/*
    **
    ** QWASAR.IO -- my_recursive_factorial
    **
    ** @param {int} param_1
    **
    ** @return {int}
    **
    */

int my_recursive_factorial(int param_1)
{
}
```

Input: 2
Output:

Return Value: 2

### Example 01

Input: 3
Output:

Return Value: 6

### Example 02

Input: 4
Output:

Return Value: 24

#### Tip

Google the following: recursive programming

Quest06	My Atoi
Submit directory	ex04
Submit file	my_atoi.c

### **Description**

The atoi() function in C takes a string (which represents an integer) as an argument and returns its value of type int. So basically the function is used to convert a string argument to an integer.

Syntax:

int atoi(const char strn)

Parameters: The function accepts one parameter strn which refers to the string argument that is needed to be converted into its integer equivalent.

Return Value: If strn is a valid input, then the function returns the equivalent integer number for the passed string number. If no valid conversion takes place, then the function returns zero.

# Function prototype (c)

```
/*
  **
  ** QWASAR.IO -- my_atoi
  **
  ** @param {char*} param_1
  **
  ** @return {int}
  **
  */
  int my_atoi(char* param_1)
  {
}
```

#### Example 00

Input: "2"
Output:

Return Value: 2

### Example 01

Input: "123"

Output:

Return Value: 123

#### Example 02

Input: "-10"

Output:

Return Value: -10

Tip

(In C)

Split the number by dividing it, and to get the rest are you aware of the mod operator?

You should google it :)

Quest06	My Fibonacci
Submit directory	ex05
Submit file	my_fibonacci.c

# Description

Create a function my\_fibonacci that returns the n-th element of the Fibonacci sequence, the first element being at the 0 index. We'll consider that the Fibonacci sequence starts like this: 0, 1, 1, 2.

If the value is less than 0, the function should return -1.

It should be prototyped:

Recursive will be helpful here.

Google fibanacci.

## Function prototype (c)

```
/*
    **
    ** QWASAR.IO -- my_fibonacci
    **
    ** @param {int} param_1
    **
    ** @return {int}
    **
    */
    int my_fibonacci(int param_1)
    {
}
```

### Example 00

```
Input: 2
Output:
Return Value: 1
```

### Example 01

```
Input: 3
Output:
Return Value: 2
```

### Example 02

```
Input: 4
Output:
Return Value: 3
```

Tip

Google the following: recursive programming

