Audit Access Expires 5 de ago de 2020
You lose all access to this course, including your progress, on 5 de ago de 2020.

Exercise: power iter

Finger Exercises due Aug 5, 2020 20:30 -03 *Completo*

Exercise: iter power

5.0/5.0 points (graded)

ESTIMATED TIME TO COMPLETE: 6 minutes

Write an iterative function `iterPower(base, exp)` that calculates the exponential base^{exp} by simply using successive multiplication. For example, `iterPower(base, exp)` should compute base^{exp} by multiplying `base` times itself `exp` times. Write such a function below.

This function should take in two values - `base` can be a float or an integer; `exp` will be an integer ≥ 0. It should return one numerical value. Your code must be iterative - use of the `**` operator is not allowed.

```
def iterPower(base, exp):
    '''
    base: int or float.
    exp: int >= 0

    returns: int or float, base^exp
    '''
    # Your code here
    resultado = 1
    for i in range(exp):
        resultado *= base
    return resultado
```

Press ESC then TAB or click outside of the code editor to exit

Correta

```
def iterPower(base, exp):
    '''
    base: int or float.
    exp: int >= 0

    returns: int or float, base^exp
    '''
    result = 1
    while exp > 0:
        result *=base
        exp -= 1
    return result
```

Test results

Hide output

CORRECT

Test: iterPower(-2.79, 0)

Output:

```
1.0000
```

Test: iterPower(-2.15, 10)

Output:

```
2110.4963
```

Test: iterPower(1.34, 5)

Output:

```
4.3204
```

Test: iterPower(-1.93, 8)

Output:

```
192.5123
```

Test: iterPower(0.46, 8)

Output:

```
0.0020
```

Test: iterPower(2.57, 2)

Output:

```
6.6049
```

Test: iterPower(-3.82, 6)

Output:

```
3107.2785
```

Test: iterPower(9.96, 2)

Output:

```
99.2016
```

Hide output

Enviar

Answers are displayed within the problem

Exercise: power iter

Ocultar discussão

Topic: Lecture 4 / Exercise: power iter

Show all posts por atividade recente

? Your code must be iterative, not recursive! why??? 3
count=exp iterPower=1 while count>0: iterPower=iterPower*base count=count-1 return()

? It just keeps saying processsing 3
Not sure what im doing wrong it works in my IDE.

? I don't understand why the grader won't take my code 5
while exp>0: base=base*base exp-=1 return int(base) This code works in my IDE, I do not underst...

Why is this code not accepted? 5
def iterPower(base, exp): ''' base: int or float. exp: int >= 0 returns: int or float, base^exp ''' if exp =...

? TypeError 3 new
Why do I keep getting this message: TypeError: a float is required? I haven't defined the type in m...

exp >= 0 3
Hi, The docstring defnies exp as an int with the condition >= 0. The grader requires that the result...

Code isn't Iterative 4
I keep getting a response that my code needs to be iterative, not recursive. I don't understand wh...

? what mistake I made? 2
def iterPower(base, exp): ans = 1 while exp > 0: ans *= base exp -=1 return ans iterPower(5,5)

I tried to paste 3 solutions here!! 3
I used the cs50 IDE for python to test my code. Here are the three solutions i came up with: ''' -----...

List Comprehensions 2
Does the grader not consider a list comprehension an iteration?

Mathematical trivia 11
Did you know that anything to the power of `0 = 1`? Or that `0/0 = 1`? Or that `i` is technically a...

whats the problem with my code 2
def iterPower(base, exp): if exp == 0: return ('1.00') elif exp == 1: return (base) while exp > 1: base ...

(SPOILER) For loop like last slide 3
I understand this may be obvious to some after week 1 but i wanted to share my experience beca...