

Curso > Week 1... > 2. Core... > Exercis...

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Exercise: vara varb

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

Exercise: vara varb

5.0/5.0 points (graded)

ESTIMATED TIME TO COMPLETE: 5 minutes

Assume that two variables, varA and varB, are assigned values, either numbers or strings.

Write a piece of Python code that evaluates varA and varB, and then prints out one of the following messages:

- "string involved" if either varA or varB are strings
- "bigger" if varA is larger than varB
- "equal" if varA is equal to varB
- "smaller" if varA is smaller than varB

Do not ask for user input

Assume that variables are defined for you by our grader code. Simply write code assuming you know the values of the variables.

```
1|if type(varA) == str or type(varB) == str:
     print('string involved')
Sellî type(varA) -- type(varb).
    if varA > varB:
5
         print('bigger')
```

```
elif varA == varB:
7
         print('equal')
8
     else:
9
         print('smaller')
```

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

Correta

```
if type(varA) == str or type(varB) == str:
    print('string involved')
elif varA > varB:
    print('bigger')
elif varA == varB:
    print('equal')
else:
    # If none of the above conditions are true,
    # it must be the case that varA < varB</pre>
    print('smaller')
```

Test results



string involved Test Values: varA = 2, varB = -8Output: bigger Test Values: varA = -8, varB = -2 Output: smaller Test Values: varA = -3, varB = 3 Output: smaller Test Values: varA = -1, varB = 4Output: smaller Test Values: varA = hola, varB = goodbye Output:

string involved Test Values: varA = -9, varB = adios Output: string involved Test Values: varA = hello, varB = hello Output: string involved Test Values: varA = hello, varB = hello Output: string involved Test Values: varA = 1, varB = 6 Output: smaller Test Values: varA = -7, varB = 7 Output:

smaller Test Values: varA = -9, varB = -9Output: equal Test Values: varA = 8, varB = -5 Output: bigger Test Values: varA = 1, varB = adieu Output: string involved Test Values: varA = -8, varB = -1 Output: smaller Test Values: varA = 8, varB = -6 Output:

```
bigger
Test Values: varA = 2, varB = -1
Output:
      bigger
Test Values: varA = -10, varB = -2
Output:
      smaller
Test Values: varA = -9, varB = 7
Output:
      smaller
                                                                     Hide output
```

Explanation

```
Is type(varA) == str or type(varB) == str equivalent to
type(varA) or type(varB) == str ? Those are not equivalent because of <a href="Python">Python</a>
<u>precedence</u> (some operations have higher precedence than others). The == has higher
precedence than the or so it will get evaluated first. Therefore:
 type(varA) or type(varB) == str
Will evaluate to the following, if we explicitly put parentheses:
 type(varA) or ( type(varB) == str )
 True or ( type(varB) == str )
( True )
```

Because "anything" or "True" will just take the value of "True" (by boolean algebra). And the other expression:

type(varA) == str or type(varB) == str

Will evaluate to the following, if we explicitly put parentheses:

(type(varA) == str) or (type(varB) == str)

So you will have to check each of the expressions in the parentheses to see whether they are true or not to determine the final result. So these two are not equal.

Hint: Remember the type function?

Hint: Recall that if you want to check whether the type of a variable is a specific kind, you can compare the type of the variable to the type of a known object.

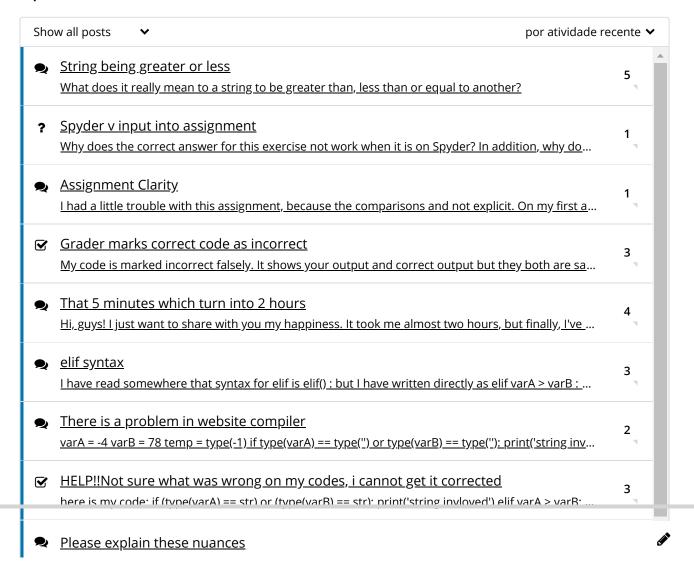
Enviar

1 Answers are displayed within the problem

Exercise: vara varb

Ocultar discussão

Topic: Lecture 2 / Exercise: vara varb



 	=		
	Hello, I noticed that if (type(varA)==str) or (type(varB)==str) is deemed NOT the same as if type (va	3	
?	Help, using and operator instead of or if type(varA) == int and type(varB)== int: elif varA>varB: print('bigger') elif varA <varb: print("smalle<="" th=""><th>2</th><th></th></varb:>	2	
Q	what am i missing? Please help below is my code. varA = -5 varB = 6 if (type(varA)==str) or (type(varB)==str): print("string involved"	4	
2	Great exercise Took me a good while to ponder about this problem. Stayed stuck but the hints and tips really hel	1	
?	Help! Unknown error =(This syntax error pop up. How do I resolve this error and what changes should I make? Test Value	2	•

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