

Welcome to Week 3

Tutorial 11 / Tutorial 6

My Office Hours

Please feel free to drop by if you have any questions about:

Lab Work
Exercises
Assignments
Just about anything else

And of course stop by and say hi!

Tuesdays	12:00 PM 1:00 PM	IC 400A
Fridays* <small>*By appointment only</small>	9:00 AM 10:00 AM	BV 471

Contact Information

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Please include in the subject line of your email:

CSCA20 - Your Name: Subject

Type Conversions

Which of these will run?

- 1 `int("four")`
- 2 `int("4")`
- 3 `int(15.39)`
- 4 `int("15.39")`
- 5 `int("CSCA20")`
- 6 `int("1.1")`
- 7 `float(int("4"))`
- 8 `int(float("5.34"))`

Type Conversions

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- | | |
|---|---------------------------------|
| 1 | <code>int("four")</code> |
| 2 | <code>int("4")</code> |
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| 6 | <code>int("1.1")</code> |
| 7 | <code>float(int("4"))</code> |
| 8 | <code>int(float("5.34"))</code> |

Reviews

What is wrong with this code?

```
1 def myFunction(num_1, num2):  
2     if num_1 > num2 and == 3:  
3         print(Tacos!)  
4     elif num_1 = num2:  
5         print('burgers!')  
6     else  
7         print("pizza")  
8     return("Food!")
```

Hint: There are 5 problems!

Reviews

How can we fix it?

```
1 def myFunction(num_1, num2):  
2     if num_1 > num2 and == 3:  
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4     elif num_1 = num2:  
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Reviews

How can we fix it?

```
1 def myFunction(num_1, num2):  
2     if (num_1 > num2) and (num_1 == 3):  
3         print("Tacos!")  
4     elif num_1 == num2:  
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6     else:  
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```

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1 def myFunction(num_1, num2):  
2     if (num_1 > num2) and (num_1 == 3):  
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```

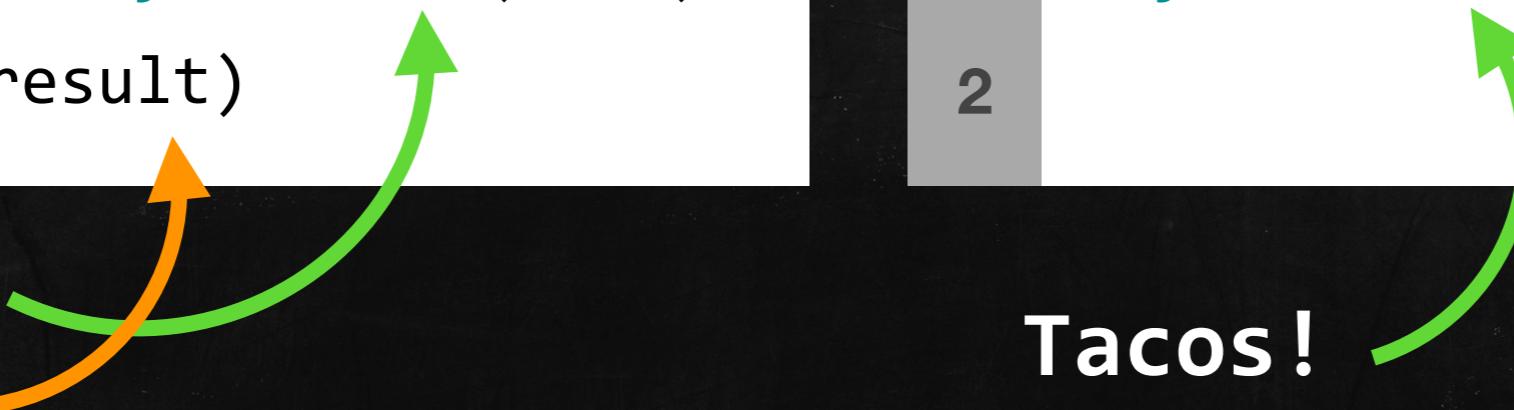
What do we expect to see?

```
1 result = myFunction(3, 1)  
2 print(result)
```

Tacos!
Food!

```
1 myFunction(3, 1)  
2
```

Tacos!



What is the difference between

`return()`

and

`print()`

- You can only return from **inside a function**.
- Values that are returned **can be saved and re-used**, but are **not displayed**.
- Return is used primarily to **retrieve data that was modified/generated**, at the end of a function call .

- You can print **anywhere** in your program.
- Printing a value **doesn't save it**. It only displays the value in the shell.
- Print statements are used to **display information to the shell**. This can be useful in debugging and testing.

Conditional Statements

```
1  if condition1:  
2      # Perform action 1  
3  
4  [if]/[elif] condition2:  
5      # Perform action 2  
6  
7  [if]/[elif] condition3:  
8      # Perform action 3  
9  
10 else:  
11     # Handle all other cases
```

Conditional Statements

What is the difference between **if** and **elif**?

A: Multiple **if** blocks can be executed,
but only one **elif** block can be executed.

AKA: **elif** blocks are mutually exclusive
with **if** blocks and other **elif** blocks.

How many **else** blocks am I allowed to have?

A: Only one at the end to catch every
other case that falls through your
ifs and **elifs**.

Conditional Statements

```
1  if a == b:  
2      if a != b:  
3          print("Goodbye")  
4      if a == 2:  
5          print("Hello")  
6      if b == 2:  
7          print("World")  
8  elif a == b and a != 4:  
9      if b != 8:  
10         print("Foo")  
11  else:  
12      print("Bar")
```

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