

## CS1302 - Lecture 5 Functions

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### [Exercise 1]

What is the output of the following? Guess!

```
def sayItTwice(x):
    print(x)
    print(x)

sayItTwice("hello")
sayItTwice(123)
```

### [Exercise 2]

What is the output of the following? Guess!

```
def times10(x):
    return x*10

print(times10)
print(times10("hello!"))
print(times10("1302"))

print(times10(1302))
print(times10(CS1302)) # Syntax error? NameError? Can the cell start run?
print(times10(1302CS)) # Syntax error? NameError? Can the cell start run?
```

### [Exercise 3]

*Remarks: The following doesn't work in OPTMentor*

(Step 1) What is the output of the following? Guess!

```
__builtin__.print(3)
```

Stop!!! The following may cause trouble !!!

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(Step 2) Guess, what does the following do?  
Will you try or not ?

```
def print(x):
    return 100

print(9)
```

(Step 3)

```
print("hello")
```

(Step 4)

```
def print(x):
    __builtin__.print(x)
```

(Step 5)

```
print("hello")
```

#### [Exercise 4]

One of the following doesn't work. How to fix?

Hint: "conditional expression" in Lecture 3

```
def showLarger(a, b):  
    print(a if a>b else print(b))
```

```
showLarger(2,3)
```

```
def showLarger(a, b):  
    result = a if a>b else result = b  
    print(result)
```

```
showLarger(2,3)
```

#### [Exercise 5]

Write a function that determines whether a letter is contained in a string.

```
def contains_letter(letter, string):
```

```
print(contains_letter("a", "hello")) # gives False  
print(contains_letter("h", "hello")) # gives True
```

#### [Exercise 6]

Write the function again that prints "Yes" / "No"

```
def contains_letter(letter, string):
```

```
contains_letter("a", "hello") # says "No"  
contains_letter("h", "hello") # says "Yes"
```