

Review:

1. Write a function that asks the user for his/her name, calculates the length of the user's name, and then prints "Your name is X characters long!" (with X being the length of their name).

Bonus only if finished: How would you write this if the function took "name" as a parameter?

Review:

1 Answer:


```
def name_length():  
    name = raw_input("What's your name?")  
    length_of_name = str(len(name))  
    print "Your name is " + length_of_name + " characters long!"  
  
name_length()
```

Bonus answer:

```
def name_length(name):  
    length_of_name = str(len(name))  
    print "Your name is " + length_of_name + " characters long!"  
  
name_length('Nina Simone')
```

Today's lesson:

Writing our own functions, with parameters!



Functions are like little machines. A function is a statement or sequence of statements that perform a computation.

Today's lesson:

```
def print_twice(I_am_a_parameter):  
    print I_am_a_parameter  
    print I_am_a_parameter
```

A parameter is a placeholder.

It's a special variable that
stores an argument.

Today's lesson:

```
def print_twice(X):  
    print X  
    print X
```

parameter

} **function**

```
def print_twice(lyrics):  
    print lyrics  
    print lyrics
```

} **function**

parameter

These functions
are exactly the same.

Today's lesson:

```
def print_twice(lyrics):  
    print lyrics  
    print lyrics
```

} **function**


```
print_twice('The revolution will not be televised.')
```

↑ This is where we
call the function.
Functions don't do
anything unless we
call them!

↑ This is the
function argument.

Today's lesson:

```
def print_twice(lyrics):  
    print lyrics  
    print lyrics  
  
print_twice('The revolution will not be televised.')
```




function



This is where we call the function.

```
The revolution will not be televised.  
The revolution will not be televised.
```



Return value, or output

Today's lesson:

```
def print_twice(lyrics):  
    print lyrics  
    print lyrics  
  
print_twice('Sinnerman, where you gonna run to?')
```

```
Sinnerman, where you gonna run to?  
Sinnerman, where you gonna run to?
```


Today's lesson:

```
def print_twice(lyrics):  
    print lyrics  
    print lyrics  
  
print_twice("These aren't even lyrics!")
```

```
These aren't even lyrics!  
These aren't even lyrics!
```

Today's lesson:

```
def print_twice(lyrics):  
    print lyrics  
    print lyrics  
  
print_twice()
```

```
print_twice()  
TypeError: print_twice() takes exactly 1 argument (0 given)
```

Your turn:

- * **Unit 2, Exercise 3**

- * Quiz on functions on Friday,
February 6.

Your turn!