Review:

1. What is the function? What is the argument? Bonus: What is the return value?

len (‘super bowl’**)**

2. What do you think will happen in this program?

```python
def print_lyrics():
    print "I'm a lumberjack, and I'm okay."
    print "I sleep all night and I work all day."

print_lyrics()
```

3. Wait – what's a function again?

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

Writing our own functions.

Time for an anatomy lesson!

Today's lesson: Function anatomy

def means function definition.

```python
def print_lyrics():
    print "I'm a lumberjack, and I'm okay."
    print "I sleep all night and I work all day."

print_lyrics()
```

Today's lesson: Function anatomy

The name of the function is **print_lyrics**

```python
def print_lyrics():
    print "I'm a lumberjack, and I'm okay."
    print "I sleep all night and I work all day."

print_lyrics()
```
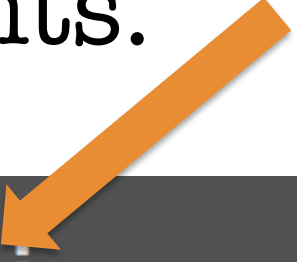
Today's lesson: Function anatomy

This function doesn't take any arguments.   The () is empty.

```
def print_lyrics():
    print "I'm a lumberjack, and I'm okay."
    print "I sleep all night and I work all day."

print_lyrics()
```

If it did, that's where they would go.

Today's lesson: Function anatomy

The first line of the function definition is called the **header**. It always ends with a colon.

```python
def print_lyrics():
    print "I'm a lumberjack, and I'm okay."
    print "I sleep all night and I work all day."

print_lyrics()
```

Today's lesson: Function anatomy

The rest is called the **body**.
The body must be indented.

```python
def print_lyrics():
    print "I'm a lumberjack, and I'm okay."
    print "I sleep all night and I work all day."


print_lyrics()
```

Today's lesson: Function anatomy

```python
def print_lyrics():
    print "I'm a lumberjack, and I'm okay."
    print "I sleep all night and I work all day."


print_lyrics()
```

```
I'm a lumberjack, and I'm okay.
I sleep all night and I work all day.
```

Return value

Today's lesson:

```python
def print_lyrics():
    print "I'm a lumberjack, and I'm okay."
    print "I sleep all night and I work all day."

def repeat_lyrics():
    print_lyrics()
    print_lyrics()

repeat_lyrics()
```

What's the return value?

Today's lesson:

Answer:

```
I'm a lumberjack, and I'm okay.
I sleep all night and I work all day.
I'm a lumberjack, and I'm okay.
I sleep all night and I work all day.
```

Today's lesson:

```python
def pizza_cost():
    cost = raw_input('How much does a pizza cost?')
    cost = float(cost)
    print cost
pizza_cost()
```

What's the return value?
(Provide your own answer to the pizza question.)

Today's lesson:

```python
def pizza_cost():
    cost = raw_input('How much does a pizza cost?')
    cost = float(cost)
    print cost
pizza_cost()
```

```
How much does a pizza cost?11
11.0
```

How can we simplify the body of the function to write it in only 2 lines?

Your turn:

* **Unit 2, Exercise 2**

* Quiz on functions on Friday, February 6.