

1. Let's Run Some Functions!

a. In the box below, write the output of the following code.

```
def my_line(x):  
    return 10 * x + 8  
  
print(my_line(1))  
print(my_line(3))  
print(my_line(5))
```

Solution:

18
38
58

b. For the function below, label: the function name, parameter, and function body.

```
def check_word(word):  
    if len(word) % 2 == 0:  
        print("Good word.")  
    else:  
        print("Bad word.")
```

Solution: The function name is `check_word`. The parameter is `word`. The function body is:

```
if len(word) % 2 == 0:  
    print("Good word.")  
else:  
    print("Bad word.")
```

c. In the box below, write the output of the following code.

```
print(check_word("thunder"))  
print(check_word("rain"))  
print(check_word("sunshine"))
```

Solution:

```
Bad word.  
None  
Good word.  
None  
Good word.  
None
```

2. Writing Functions

Fill in the blanks of the code to create a function that computes how many legs there are for when there are `num_dogs` many dogs. Your code should result in the same output.

```
def num_legs(num_dogs):  
  
    return -----  
  
print(num_legs(2))  
print(num_legs(1))
```

```
8  
4
```

Solution: `num_dogs * 4`

3. Writing More Functions

Write a function that takes in `word_1` and `word_2`, and returns the word with more characters (the longer word). If `word_1` and `word_2` have the same number of characters, return `word_1`.

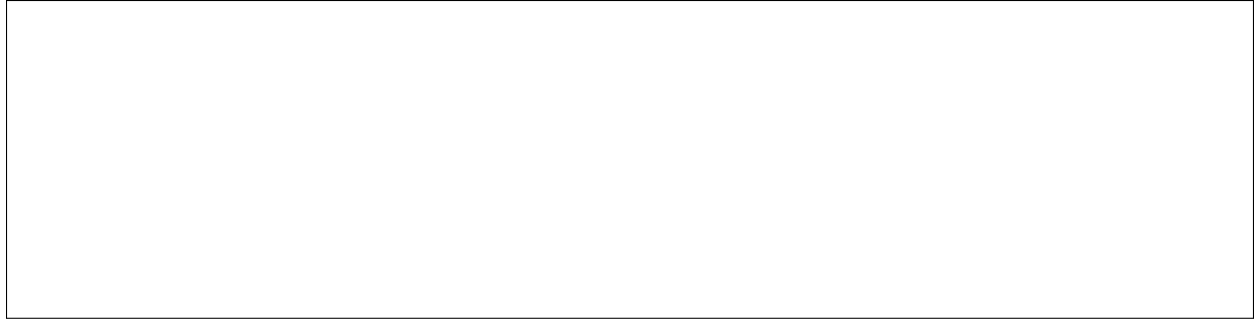
```
def longer_word(word_1, word_2):
```

Solution:

```
def longer_word(word_1, word_2):  
    if len(word_1) >= len(word_2):  
        return word_1  
    return word_2
```

4. Print vs. Return?

Recall from lecture. What is the difference between `print` and `return`?



Solution: `print` can be used outside of a function. It displays an output. The function returns `None`.

`return` specifies the value that a function call evaluates to. It does not display any output.