

# lecture\_9\_practice

February 6, 2024

## 1 Practice: Functions

Create a function called `say_goodbye` which displays the text “Goodbye!”

```
[1]: def say_goodbye():  
      print("Goodbye!")
```

Write code that calls the function `say_goodbye`

```
[2]: say_goodbye()
```

Goodbye!

Redefine the function `say_goodbye` to take a parameter called `name`, and have it display “Goodbye `name`!” where “`name`” is replaced by whatever was in the `name` variable

```
[5]: def say_goodbye(name):  
      print("Goodbye", name)
```

Write code that calls the function `say_goodbye` but with your name as a parameter

```
[6]: say_goodbye("Ryan")
```

Goodbye Ryan

Try out the code below which counts from 0 to 4 slowly:

```
[7]: import time # We need the time library for the following examples
```

```
[8]: for i in range(5):  
      print(i)  
      time.sleep(1)
```

0  
1  
2  
3  
4

We can put that for loop in a function like this:

```
[9]: def counter():  
      for i in range(5):  
          print(i)  
          time.sleep(1)
```

And then we can call it:

```
[10]: counter()
```

```
0  
1  
2  
3  
4
```

Now redefine `counter` by 1. copying the code above which defines `counter` 2. make the counter take a parameter called `max` 3. Have the `range` call use the parameter `max`

```
[11]: def counter(max):  
      for i in range(max):  
          print(i)  
          time.sleep(2)
```

Now try calling the new version of `counter` but passing it the argument 7

```
[12]: counter(7)
```

```
0  
1  
2  
3  
4  
5  
6
```

Create a function called `multiply` which takes two arguments, multiplies them together (\*), and then returns the multiplied value

```
[14]: def multiply(i, j):  
      return i * j
```

Call the `multiply` function with two numbers and save the result in a variable. Then print out the variable to see that the multiplied number was saved.

```
[17]: result = multiply(3, 9)  
      print(result)
```

```
27
```

```
[ ]:
```