

LOOPS, FUNCTIONS & ANIMATION

Naila @ JamCoders 2026 - lab w1d2b

REVIEW: PRINT VS RETURN

PRINT

- Use **print** if you want to display something.
- `print()` is a function, but it returns `None`.

RETURN

- Use **return** if you actually want to give something to someone else.
- You can ONLY use `return` **inside a function**.

```
def simple_return():  
    return "This is fun"  
my_output = simple_return()  
print(my_output)
```

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- Use **print** if you want to display something.
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RETURN

- Use **return** if you actually want to give something to someone else.
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```
def simple_return():  
    print("This is less fun")  
my_output = simple_return()  
print(my_output)
```

LET'S ASK KANAV

What happens on the radio when Spain scores a goal?



CREATING STRINGS EFFICIENTLY

What happens on the radio when Spain scores a goal?

G000L

Yes, that many o's.

CREATING STRINGS EFFICIENTLY

Let's try to write

G00L

without typing the “o” 40 times.

CREATING STRINGS EFFICIENTLY

```
radio_voice = "G" + "oooooooooooooooooooooooooooooooooooooooo" + "l"  
  
print(radio_voice)
```

```
radio_voice_better = "G" + "o"*40 + "l"  
  
print(radio_voice_better)
```

Do you think there is a difference between the first and second print?

DRAWING A DOUBLE DIAGONAL

Number of rows: $x = 4$

#		#			
	#		#		
		#		#	
			#		#

```
def draw_double_diagonal(x):  
    for i in range(x):  
        # Create a string with the line  
        my_output = " "*i + "# "*2  
        # Print our string  
        print(my_output)
```



TWO MORE FUNCTIONS: SLEEP() AND CLEAR_OUTPUT()

- `sleep(x)`
 - INPUT: `x` (float or integer)
 - OUTPUT: `None`
 - *What does it do?* Nothing! ... but only during `x` seconds.
- `clear_output()`
 - INPUT: `None`
 - OUTPUT: `None`
 - *What does it do?* Erases previous outputs of the cell.



EXAMPLE: SLEEP() AND CLEAR_OUTPUT()

```
x = 5 # desired duration of nap (in seconds)

sleep(x)

print("WAKE UP, DANIEL!!!")

# uh oh... Frank is here, he cannot find out we shouted!

clear_output()
```

NOW, EVERYBODY, GET TO WORK! YOU'RE READY FOR THIS :)