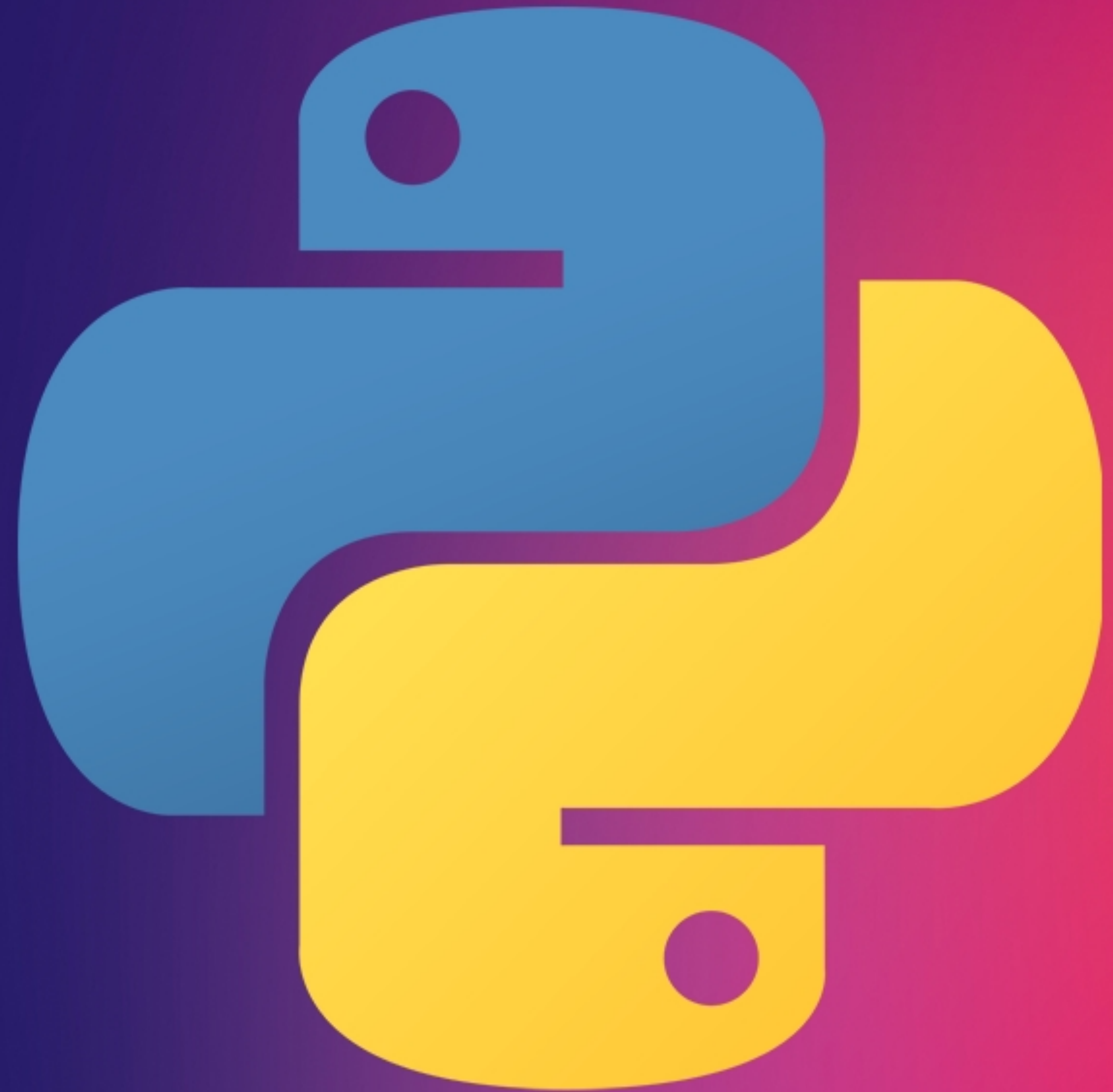


PYTHON

For Beginners

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RECAP

➤ Last Time we learned

➤ Lists

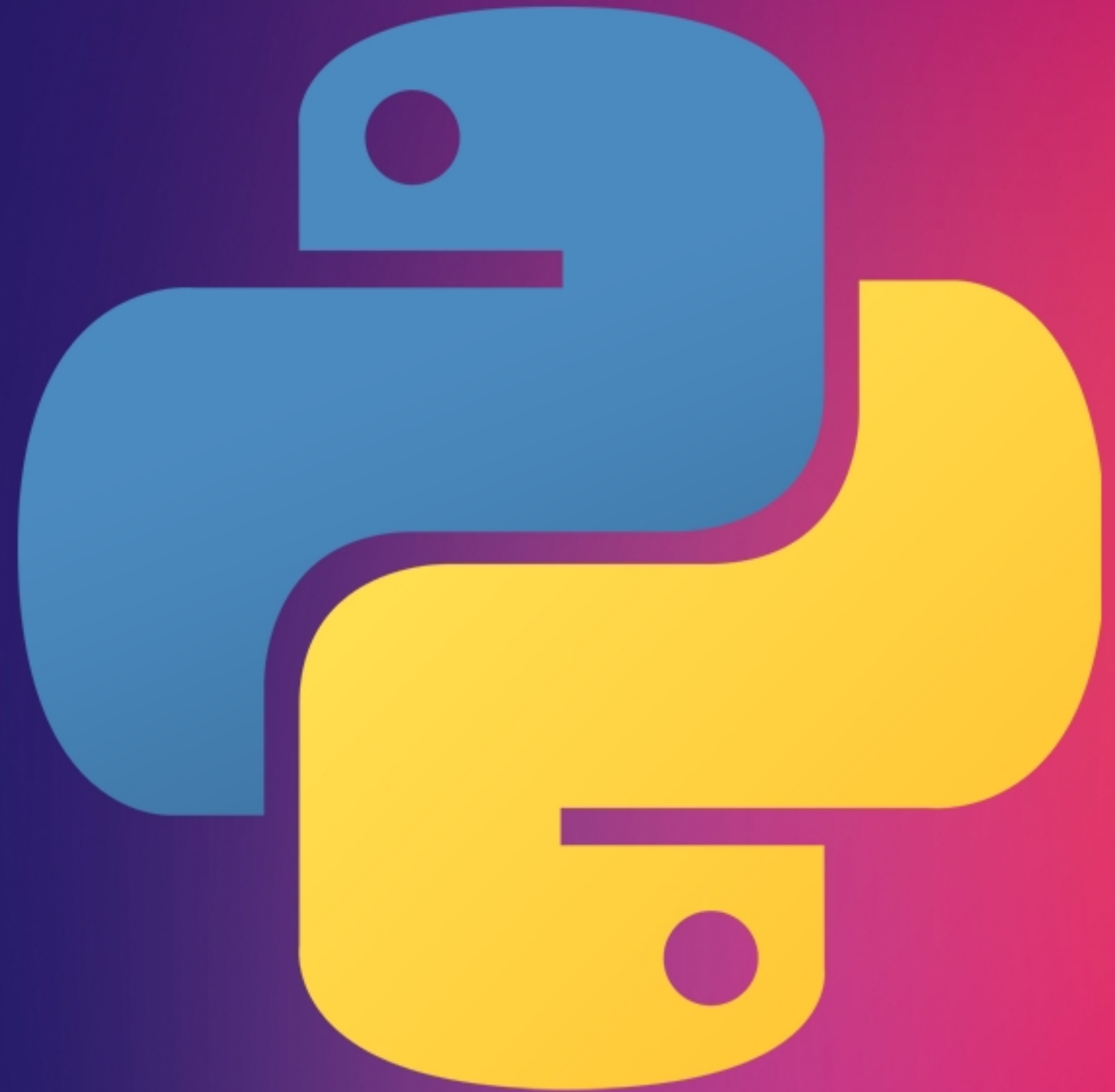
➤ Sets

➤ Dictionary

➤ Operations

➤ Loops

FUNCTIONS



WHY DO WE NEED FUNCTION

- Programming languages are designed to work on data and functions are an effective way to manage and transform this data.
- Functions are like reusable tasks.
- Would you rather write a piece of code 10 times, to write it once and call it 10 times?
- DRY - Don't repeat yourself.

- Example: Calculator



WHAT ARE PYTHON FUNCTION

- To define a Python function, you'd have to use the '**def**' keyword before the name of your function and add parentheses to its end, followed by a colon(:).
- A function in Python may contain any number of parameters or none
- A Python function could also optionally return a value.
 - This value could be a result produced from your function's execution or even be an expression or value that you specify after the keyword 'return'.
 - And, after a return statement is executed, the program flow goes back to the state next to your function call and gets executed from there.
- Types of function:
 - Built in - `abs()`, `len()`
 - User Defined.

USER DEFINED FUNCTION WITHOUT RETURNING

```
def my_function(my_str):  
    print("Hello from a function" + my_str)  
my_function()
```

```
def my_function(country = "India"):  
    print("I am from " + country)
```

```
my_function("Brazil")  
my_function()
```

USER DEFINED FUNCTION WITH RETURN

```
def my_function(x): # takes a parameter and returns the value multiplying it by 5  
    return 5*x
```

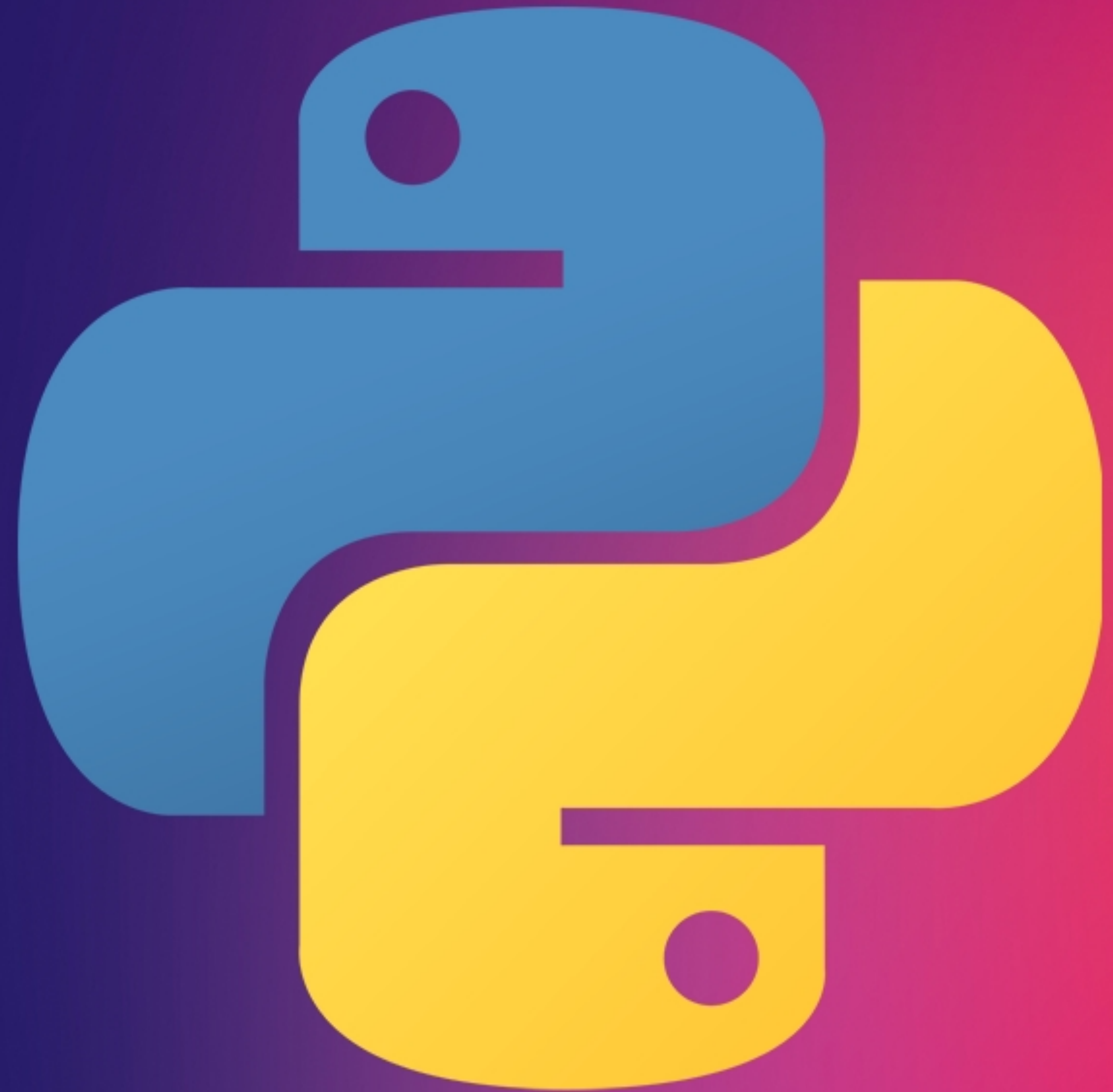
```
print(my_function(3))
```

```
print(my_function(5))
```

```
def myfunction(): # a function body cannot be empty, so you can use pass.  
    pass
```

CLASS EXERCISE

TYING THINGS TOGETHER



EXERCISE(S)

- Problem 1 (Sets ? Or List or Dictionary)
 - Given a sentence containing n words. Remove all duplicates words keeping the order of the rest of the words the same.