Local & Global Scope

What is a variable scope?

Where a variable can be accessed

Global or local

In Python, functions have local scope

Local variables

```python
def Seattle():
    dogs = 1000
    print('Seattle has', dogs, 'dogs.')
```

```python
def Bellevue():
    dogs = 2000
    print('Bellevue has', dogs, 'dogs.')
```

```python
# Program output:
# Seattle has 1000 dogs.
# Bellevue has 2000 dogs.
```

Variables declared inside a function only exist inside that function

When a function call ends, the variable is deleted

When the function is called again, it is declared again

Global variables

```
myProgram.py

x = 1
# x can be accessed here, y cannot

def myFn():
    y = 2
    # both x and y can be accessed here
```
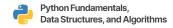
Modifying global variables

```python
my_string = "Set in global scope"

def main():
    my_string = "Set in local scope"

main()
print(my_string)
```

Result from running this code:

```
Set in global scope
```

Modifying global variables

```python
my_string = "Set in global scope"

def main():
    global my_string
    my_string = "Set in local scope"


main()
print(my_string)
```

Result from running this code:

```
Set in local scope
```