

Variable Scope

The scope of a variable in python is that part of the code where it is visible

```
def f( x ):
    x = x + 1
    return x

number=2
z = f(number)
print(z)
```

```
def f( x ):
    number = x + 1
    return x

z = f(number)
print(z)
```

```
NameError: name 'number' is not defined
```



Variable Scope



Global Scope

Local scope

Variable Scope

Local Scope: A variable created inside a function belongs to the local scope of that function, and can only be used inside that function.

```
def func():  
    name="python"  
    print(name)
```

```
func()  
print(name)
```

we define a variable 'name' in a function 'func'. So, 'name' is local to 'func'. Hence, we can read/write it in func, but not outside it.

```
NameError: name 'name' is not defined
```

Variable Scope

Global Scope: A variable created in the main body of the Python code, the variable is visible anywhere in the program

```
def func():  
    print(name)  
  
name="Java"  
func()  
print(name)
```

Java

Java

we accessed the global Scope 'name' inside 'func', but it is bad practice to try to manipulate global values from inside local scopes.

Try to pass the variable as a parameter to the function.

```
def f(y):  
    x = 1  
    x += 1  
    print(x)
```

```
x = 5  
f(x)  
print(x)
```

```
def g(y):  
    x = +1
```

```
g(x)  
print(x)
```

What are the results?