

Local and Global Variable in python

Before we dive into the difference between local and global variables. Let's first recall what a variable in python.

A variable is a named in memory that stores a value. In Python we can assign values to variable using the assignment operator.

Example:

```
a=10  
print(a)
```

Now, let's talk about local and global variables.

A local variable is a variable that is defined within a function and is only accessible within that function. It is created the function is called and is destroyed when the function returns.

On the other hand a global variable that is defined outside of a function and it is accessible from within any function in your code.

Here's an example to help clarify the difference.

Example:

```
k=22  
def abcFun():  
    abc=123  
    print(abc) #local variable  
  
print(k)  
#print(abc)
```

The global Keyword

Now what if we want to modify a global variable from within a function? This is where the global keyword comes in.

The global keyword is used to declare that a variable is a global variable and should be accessed from the global scope. Here's an Example:

```
a=10 #global variable
x=5
print(a)

def func1():
    global x
    x=33
    y=20 #local variable
    print(y)
    print(x)

#print(y) # error is occur
func1()
```

In this example, we used the global keyword to declare that we want to modify the global variable is from within the function. As a result , the value of x is changed to 33;

Source Code

```
k=22
def abcFun():
    abc=123
    print(abc) #local variable

print(k)
#print(abc)

# a=10 #global variable
# x=5
# print(a)

# def func1():
```

```
# global x
# x=33
# y=20 #local variable
# print(y)
# print(x)

# #print(y) # error is occur
# func1()
# #print(x)
```

Thank You