

# Python

Global Variables

# Global Variables

A variable that can be used by multiple functions

# Declare Global

For a variable to be global, the variable has to be declared global and is the first statement of a function.

# Try This

```
def sub1():  
    z=10  
    print('s1 ',z)  
    z=z+1  
    print('s2 ',z)  
    z=z+1  
    return
```

```
def main():  
    x=1  
    sub1()  
    print('M1 ',x)  
    x=x+2  
    sub1()  
    print('M2 ',x)  
    x=x+2  
    sub1()  
main()
```

# Traditional

Add the Global command to the function.

Main line code is NOT a function

# Note

```
def sub1():  
    global x  
    print('s1 ',x)  
    x=x+1  
    print('s2 ',x)  
    x=x+1  
    return
```

```
x=5  
sub1()  
print('M1 ',x)  
x=x+2  
sub1()  
print('M2 ',x)  
x=x+2  
sub1()
```

MAIN

global02

Try  
This

```
def sub1():  
    global x  
    print('s1 ',x)  
    x=x+1  
    print('s2 ',x)  
    x=x+1  
    return  
  
x=5  
sub1()  
print('M1 ',x)  
x=x+2  
sub1()  
print('M2 ',x)  
x=x+2  
sub1()
```

Main function

Global variable when main is  
function (cross function variable)



# Note

```
def sub1():  
    global x  
    print('S1 ',x)  
    x=x+1  
    print('S2 ',x)  
    x=x+1  
    return
```

```
def main():  
    global x  
    x=5  
    sub1()  
    print('M1 ',x)  
    x=x+2  
    sub1()  
    print('M2 ',x)  
    x=x+2  
    sub1()  
main()
```

# Try This

```
def sub1():  
    global x  
    print('S1 ',x)  
    x=x+1  
    print('S2 ',x)  
    x=x+1  
    return
```

```
def main():  
    global x  
    x=5  
    sub1()  
    print('M1 ',x)  
    x=x+2  
    sub1()  
    print('M2 ',x)  
    x=x+2  
    sub1()  
main()
```

done