

Flow of Execution in a Function Call

Flow of Execution in a Function Call

➤ Programs to add two number through a function

```
# program add.py to add two numbers through a function
def calcSum (x, y) :
    s = x + y                # statement 1
    return s                 # statement 2
num1 = float(input( "Enter first number : " ) )    # 1 (statement 1)
num2 = float(input( "Enter second number : " ) )   # 2 (statement 2)
sum = calcSum(num1, num2)                          # 3 (statement 3)
print("Sum of two given numbers is", sum)          # 4 (statement 4)
```

016 PROGRAM TO ADD TWO NUMBERS

```
def calcsum(x,y): 1 usage
```

```
    sum= x+y
```

```
    return sum
```

```
num1=float(input("Enter first number: "))
```

```
num2=float(input("Enter second number: "))
```

```
sum=calcsum(num1,num2)
```

```
print("sum of two given numbers is",sum)
```

Flow of Execution in a Function Call

- Program execution begins with the first statement of `_main_` segments.
- Def are also read but ignored until called.
- it will become clear to you a few moments just read on

NOTE : The flow of execution refers to the order in which statements are executed during a program run.

017 TWO NUMBERS FOR SUM

```
x=(int(input("enter the first number for the sum:")))
y=(int(input("enter the second number for the sum:")))
def sum(x,y):
    s=x+y
    return s
print(sum(x,y))
```

Flow of Execution in a Function Call

- **Arguments and parameters**
- As you know that you can pass values to functions.
- For this, you define variables to receive values in function definition and you send values via function call statement.
- For example,

018 FUNCTION WITH ARGUMENTS

```
def multiply (a, b): 5 usages
```

```
    print(a * b)
```

```
y = 3
```

```
multiply(a: 12, y)
```

```
multiply(y, y)
```

```
x = 5
```

```
multiply(y, x)
```

Flow of Execution in a Function Call

➤ Arguments in Python can be one of these value types:

- Literals
- Variables
- Expressions

Flow of Execution in a Function Call

```
multiply( 3, 4 )
```

```
# both literal arguments
```

```
p = 9
```

```
multiply( p, 5)
```

```
# one literal and  
# one variable argument
```

```
multiply( p, p + 1)
```

```
# one variable and  
# one expression argument
```

019 FUNCTION WITH ARGUMENTS

```
def multiply (a, b): 5 usages  
    print(a * b)
```

```
p = 9
```

```
multiply(p, b: 5)
```

```
multiply(p, p+1)
```