

FUNCTION ARGUMENTS

Default arguments

```
def inp(s, b=10):  
    . . .
```

Default value is provided in function definition. If parameter is omitted, default value is used.

Default value must be available at definition time.

Default arguments

```
def f(a, b, c=15, d=32):  
    . . .
```

`f(13, 12)` is interpreted as `f(13, 12, 15, 32)`

`f(13, 12, 26)` is interpreted as `f(13, 12, 26, 32)`

`f(15, 56, 45, 12)` `a=15` , `b=56` , `c=45` , `d=12`

Parameter Order is important

Its values are identified by position,

Default values must come at the end

Function definitions

`def` associates a function body with a name

Flexible, like other value assignments to name

Definition can be declared inside conditional

Statements

```
if condition:
    def u(a,b,c):
        . . .
else:
    def u(a,b,c):
        . . .
```

Function definitions

Can assign a function to a new name

```
def f(a, b, c):
```

```
    . . .
```

```
g = f
```

Now `g` is another name for `f`

Can pass functions

Implement f to x n times

```
def imp(f, x, n):  
    r = x  
    for i in range(n):  
        r = f(r)  
    return(r)
```

```
def sq(x):  
    return(x*x)  
  
imp(sq, 5, 2)  
  
sq(sq(5))
```