

Parameters

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#-----
#   N a m e d   P a r a m e t e r s
#-----

def PrintInfo( name, age, friends ) :

    # Output the values of the string 'name', the number 'age',
    # and the length and all the elements of the list 'friends'

    print( )

    print( "My name is %s, I am %i years old, and I have %i friends:" % \
          ( name, age, len( friends ) ),
          end = "" )

    for friend in friends :
        print( " %s" % ( friend ), end = "" )

    print( )
```

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#-----

>>> PrintInfo( "Ann", 23, [ "Tim", "Bob", "Sue" ] )
My name is Ann, I am 23 years old, and I have 3 friends: Tim Bob Sue

>>> PrintInfo( name = "Ann", age = 23, friends = [ "Tim", "Bob", "Sue" ] )
My name is Ann, I am 23 years old, and I have 3 friends: Tim Bob Sue

>>> PrintInfo( age = 23, friends = [ "Tim", "Bob", "Sue" ], name = "Ann" )
My name is Ann, I am 23 years old, and I have 3 friends: Tim Bob Sue
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#-----
#   D e f a u l t   P a r a m e t e r s
#-----

def PrintInfo( name = "PRIVATE", age = 40, friends = [ ] ) :

    # Output the values of the string 'name', the number 'age',
    # and the length and all the elements of the list 'friends'

    print( )

    print( "My name is %s, I am %i years old, and I have %i friends:" % \
          ( name, age, len( friends ) ),
          end = "" )

    for friend in friends :
        print( " %s" % ( friend ), end = "" )

    print( )
```

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```
>>> PrintInfo( "Ann", 23, [ "Tim", "Bob", "Sue" ] )
My name is Ann, I am 23 years old, and I have 3 friends: Tim Bob Sue
```

```
>>> PrintInfo( "Ann", 23 )
My name is Ann, I am 23 years old, and I have 0 friends:
```

```
>>> PrintInfo( "Ann" )
My name is Ann, I am 40 years old, and I have 0 friends:
```

```
>>> PrintInfo( )
My name is PRIVATE, I am 40 years old, and I have 0 friends:
```

```
>>> PrintInfo( age = 18 )
My name is PRIVATE, I am 18 years old, and I have 0 friends:
```

```
>>> PrintInfo( name = "Bob", friends = [ "Ann", "Ned" ] )
My name is Bob, I am 40 years old, and I have 2 friends: Ann Ned
```

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#-----
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Parameters

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#-----
#  F l e x i b l e   N u m b e r   o f   P a r a m e t e r s
#-----

def Average( *numbers ) :

    # The average of all parameters in the tuple 'numbers',
    # or 0.0 if there are no such parameters

    if numbers == ( ) :
        return 0.0
    else :
        return sum( numbers ) / len( numbers )

#-----

#-----

>>> Average( 2, 3 )
2.5

>>> Average( 1, 2, 3, 4, 5 )
3.0

>>> Average( 7 )
7.0

>>> Average( )
0.0

#-----

```

```

#!/usr/bin/env python3

#-----
#  C o m m a n d - L i n e   P r o g r a m s   a n d   A r g u m e n t s
#-----

# This program just outputs its command-line arguments
#
# ( the program is stored in the executable file 'printargs' )

from sys import argv

print( )
print( "argv      =", argv )
print( )

for i in range( len( argv ) ) :
    print( "argv[ %i ] = %s" % ( i, argv[ i ] ) )
print( )

#-----

#-----

$ printargs

argv      = ['./printargs']

argv[ 0 ] = ./printargs

#-----

$ printargs So Long Marianne

argv      = ['./printargs', 'So', 'Long', 'Marianne']

argv[ 0 ] = ./printargs
argv[ 1 ] = So
argv[ 2 ] = Long
argv[ 3 ] = Marianne

#-----

$ printargs 1 2 3 hello 4567

argv      = ['./printargs', '1', '2', '3', 'hello', '4567']

argv[ 0 ] = ./printargs
argv[ 1 ] = 1
argv[ 2 ] = 2
argv[ 3 ] = 3
argv[ 4 ] = hello
argv[ 5 ] = 4567

#-----

```