PYTHON - PART 2 - ADDITIONAL

Computer systems
CFGS DAW

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Licencia

Nomenclatura

A lo largo de este tema se utilizarán distintos símbolos para distinguir elementos importantes dentro del contenido. Estos símbolos son:

Importante

Atención

Interesante

PYTHON - PART 5

1. PASS OF ARGUMENTS

In this unit, you will learn how to execute a Python program from console and how to pass values to the program.

To do this, you need to import the **sys library**.

The **sys.argv** array stores the name of the program in the first position (0), and the values passed in the other positions.

If you execute from console:

py example.py 2 3 4

The sys.argv array will contain:

sys.argv[0] → *example.py*

sys.argv[1] → *2*

sys.argv[2] → *3*

sys.argv[3] → *4*

For more information: https://docs.python.org/3/library/sys.html?highlight=sys%20argv#sys.argv

2. EXAMPLES

2.1 Example 1

```
import sys
print("This is the name of the program:", sys.argv[0])
print("Argument List:", str(sys.argv))
```

Execute this code from your IDE (Visual Studio Code recommended) and check the result.

2.2 Example 2

```
import sys
print("This is the name of the program:", sys.argv[0])
print("This is the first value passed", sys.argv[1])
print("This is the second value passed", sys.argv[2])
print("This is the third value passed", sys.argv[3])
print("Argument List:", str(sys.argv))
```

Save this code as example2.py and go to the terminal, where you saved the file (recommended the workspace created with Visual Studio Code).

Execute it using py command → *py example2.py 2 3 4*

2.3 Example 3

To validate the number of arguments passed, you can use the *len* function.

```
# We import module sys
import sys
# Len function tell us length of an array. “sys.argv” is an array
# with received parameters
if len(sys.argv) != 3:
    print ('2 parameters are required')
else:
    num1=int(sys.argv[1])
    num2=int(sys.argv[2])
    result=num1+num2
    print(result)
```

Save this code as example3.py and go to the terminal, where you saved the file (recommended the workspace created with Visual Studio Code).

Execute it using py command → *py example3.py 2 3*

Execute it using py command → *py example3.py 2*

Execute it using py command → *py example3.py*

Execute it using py command → *py example3.py 2 3 4*

```
Python > example3.py > ...
1   # We import module sys
2   import sys
3   # Len function tell us length of an array. “sys.argv” is a
4   # # with received parameters
5   if len(sys.argv) != 3:
6       print ('2 parameters are required')
7   else:
8       num1=int(sys.argv[1])
9       num2=int(sys.argv[2])
10      result=num1+num2
11      print(result)
12
13

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL

PS                                  Python> py .\example3.py 2 3
5
PS                                  \Python> py .\example3.py 2
2 parameters are required
PS                                  \Python> py .\example3.py
2 parameters are required
PS                                  \Python> py .\example3.py 2 3 4
2 parameters are required
```