

Sistemas Informáticos (Computer Systems)

# Scripting in Python 03. Guide

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Authors: Sergi García, Alfredo Oltra

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## SCRIPTING IN PYTHON - PART 03 - GUIDE

### 1. WHAT TO DO?

In this unit, we are going to show you how to execute Linux/Windows commands and obtain its output as a variable. Also, we are going to know how to pass arguments using Linux/Windows console.

In order to use next commands, we have to use “import” clause in order to import modules that had custom functions. If you want to know more about modules, please visit this link [https://www.w3schools.com/python/python\\_modules.asp](https://www.w3schools.com/python/python_modules.asp).

### 2. EXECUTE LINUX/WINDOWS COMMANDS

To execute Linux/Windows commands and obtain its output, you can use this link.

One example:

```
# We import module "subproces" that let us execute commands
import subprocess
# subprocess.check_output runs a command and obtain its output
output = subprocess.check_output("cat /etc/services", shell=True)
```

### 3. PASS ARGUMENTS FROM CONSOLE TO OUR PROGRAM

For passing arguments from console to a Python program, we have to import “sys” and use “sys.argv”. This variable contains an array with executable name in position 0 and in next positions it has arguments in order.

```
# 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:
    print (sys.argv[0]) # shows name of executable file
    print (sys.argv[1]) # shows first argument
    print (sys.argv[2]) # shows second argument
```

### 4. OBTAIN CURRENT DATE + TIME IN PYTHON 3

Using Python, you can check current date + time using “datetime” module and format it in different ways. For example, if you want to print a string with date in this format “2023-02-27-11-00” you can use this code:

```
from datetime import datetime
# Get the current date and time
now = datetime.now()
# Format the date and time (Y->year, m->month, d->day, H-> hour and M->minute)
formatted_date = now.strftime("%Y-%m-%d-%H-%M")
# Print the formatted string
print(formatted_date)
```

This code uses the “datetime” module to get the current date and time, and then formats it according to the specified format using “strftime”. If you want to know more about admitted formats in “strftime” you can visit this link <https://strftime.org/>.

#### 5. I HAVE FINISHED READING THIS DOCUMENT. WHAT SHOULD I DO NEXT?

We have provided several non-assessable activities. They are available in “**Scripting in Python - Part 03 - Activities 01**” file. You should try to solve them and ask doubts in forums.

#### 6. INFORMATION

You can find more information and example in these links:

[https://www.programcreek.com/python/example/2696/subprocess.check\\_output](https://www.programcreek.com/python/example/2696/subprocess.check_output)

<https://queirozf.com/entries/python-3-subprocess-examples#run-example-store-output-and-error-message-in-string>