Python training - lab 8

Docstrings

```
# NumPy/SciPy docstring example
def func(a, b):
    """This the documentation title.

    Parameters
    ----------
    a : str
        description of the first param
    b : int
        description of the second param

    Returns
    ----------
    str:
        some description for the return
    """

    return a * b


func('ab', 4)

help(func)
```

Docstrings

```
# reStructured Text docstring
def func2(a, b=1):
    """Some description

    :param a: first parameter
    :type a: str

    :param b: second parameter (default is 1)
    :type b: int

    :returns: some return
    :rtype: str
    """

    return a * b

# alternatives: Epytext, Google
```

Modules

```
# possible to import one module or more
import module1
import module1, module2

# import modules from subfolders
import folder.subfolder.module

# import module as alias
import folder.subfolder.module as alias

# import only some functions
from module1 import my_func1, my_func2
from module1 import my_func1 as other_func
```

Modules

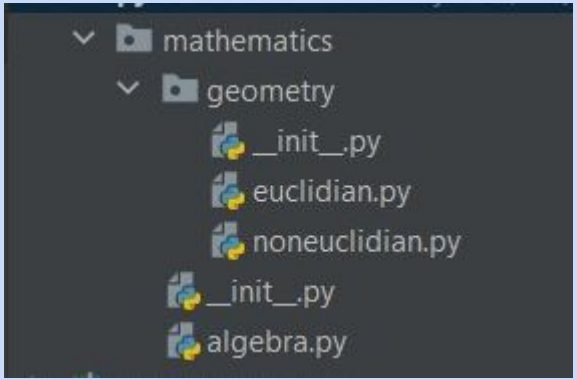
```
# import everything from module
from module1 import *

def my_func1():
   pass

# careful at the function call
module1.my_func1()
my_func1()
```

Modules

```
def func1(a):
    return a * 2

def func2(a, b):
    return a * b

if __name__ == '__main__':
    # this will not run
    # when the file will be imported
    print(func1(6))
```

Package

```
# packages - collection of modules

from mathematics import algebra
import mathematics.geometry.euclidian
```



PYTHONPATH

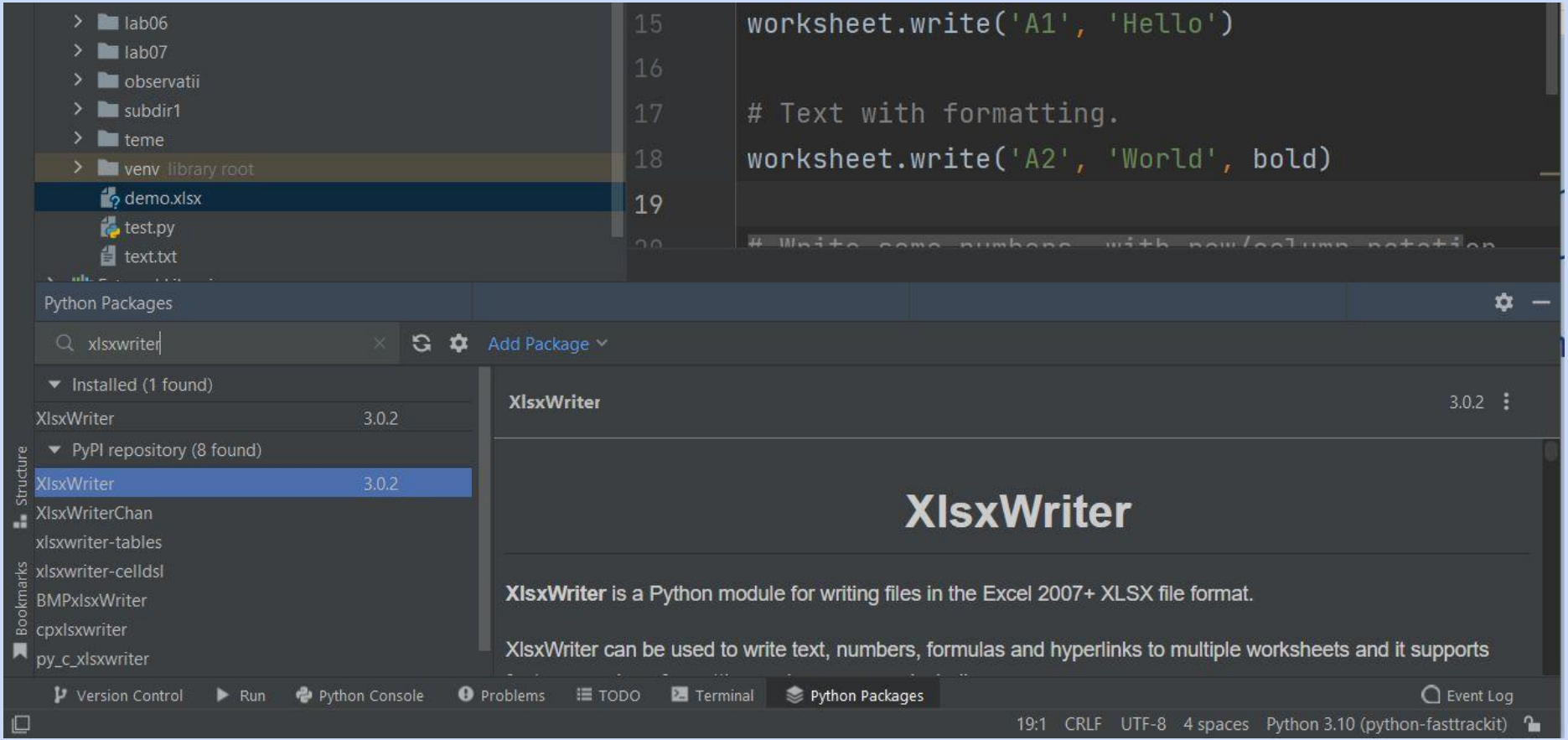
```
# environment variable
# contains paths where packages are located

PYTHONPATH=path/to/dir1;path/to/dir2
```

Packages

Additional packages on https://pypi.org/
install additional packages :

pip install <package-name>:version

Packages


lab06
lab07
observatii
subdir1
teme
venv library root
demo.xlsx
test.py
text.txt
15 worksheet.write('A1', 'Hello')
16
17 # Text with formatting.
18 worksheet.write('A2', 'World', bold)
19
Python Packages
xlsxwriter
Add Package
Installed (1 found)
XlsxWriter 3.0.2
PyPI repository (8 found)
XlsxWriter 3.0.2
XlsxWriterChan
xlsxwriter-tables
xlsxwriter-celldsl
BMPxlsxWriter
cpxlsxwriter
py_c_xlsxwriter
XlsxWriter 3.0.2
XlsxWriter
XlsxWriter is a Python module for writing files in the Excel 2007+ XLSX file format.
XlsxWriter can be used to write text, numbers, formulas and hyperlinks to multiple worksheets and it supports
Structure
Bookmarks
Version Control
Run
Python Console
Problems
TODO
Terminal
Python Packages
Event Log
19:1 CRLF UTF-8 4 spaces Python 3.10 (python-fasttrackit)