Laboratorium **Programowanie w języku Python 2** Wydział Elektrotechniki Automatyki I Informatyki Politechnika Świętokrzyska	
Studia: **Stacionarne I stopnia**	Kierunek: **Informatyka**
Data wykonania: **13.05.2021**	Grupa: **3ID16B**
Imię I nazwisko: **Arkadiusz Więcław**	Temat ćwiczenia: **LibreOffice makra**

Zad 1:

HelloWorld- wyświetla napis hell world

Capitalise - zamienia zaznaczony tekst na duże litery

TableSample - tworzy przykładową tabele z tekstem pod spodem

Wyniki:

HelloWorld

HELLO WORLD (IN PYTHON)

Capitalise

Hello World (in Python)

TableSample

The first line in the newly created text document.
Now we are in the second line

FirstColumn	SecondColumn	ThirdColumn	SUM
22,5	5615,3	-2315,7	3322,1
21,5	615,3	-315,7	321,1
121,5	-615,3	415,7	-78,1

This is a colored Text - blue with shadow

The first line in the newly created text frame.
With this second line the height of the rame raises.

That's all for now !!

Zad 2:

Przykład 1

```
import uno
from com.sun.star.text.ControlCharacter import PARAGRAPH_BREAK
def my_first_macro_writer():
doc = XSCRIPTCONTEXT.getDocument()
text = doc.getText() # com.sun.star.text.Text
cursor = text.createTextCursor()
cursor.setPropertyValue("CharColor",15345232)
cursor.setPropertyValue("CharFontName", "Arial")
text.insertString(cursor, 'Python', 0)
text.insertControlCharacter( cursor, PARAGRAPH_BREAK, 0 )
cursor.setPropertyValue("CharColor", 45345232)
text.insertString(cursor, 'Java', 0)
return
```

Wynik:

Przykład 2

```
import uno
def my_first_macro_calc():
    doc = XSCRIPTCONTEXT.getDocument()
    cell = doc.Sheets[0]['A1']
    cell2 = doc.Sheets[0]['B2']
    cell3 = doc.Sheets[0]['C3']
    cell4 = doc.Sheets[0]['D4']
    #com.sun.star.sheet.XSpreadsheetDocument
    cell.setString('Python1')
    cell2.setString('Python2')
    cell3.setString('Python3')
```

```
    cell4.setString('Python4')
    return
```

Wynik:

	A	B	C	D
1	Python1			
2		Python2		
3			Python3	
4				Python4
5				

Przykład 3

```
import uno
def hello_world():
    context = uno.getComponentContext()
    desktop =
context.ServiceManager.createInstanceWithContext("com.sun.star.frame.D
esktop", context)
    document = desktop.getCurrentComponent()
    sheet = document.Sheets[0]
    sheet.getName()
```

Wynik:

```
Skrypt nic nie robi.
```

Zad 3:

```
import uno
from com.sun.star.text.ControlCharacter import PARAGRAPH_BREAK
from com.sun.star.text.TextContentAnchorType import AS_CHARACTER
from com.sun.star.awt import Size
def insertTextIntoCell( table, cellName, text, color ):
   tableText = table.getCellByName( cellName )
   cursor = tableText.createTextCursor()
   cursor.setPropertyValue( "CharColor", color )
   tableText.setString( text )
"""
makro tworzy tabele i etykiete
"""
def macro_cr_zad3():
   doc = XSCRIPTCONTEXT.getDocument()
   text = doc.Text
   cursor = text.createTextCursor()
```

```
    text.insertString( cursor, "Tabela \n", 0 )
    table = doc.createInstance( "com.sun.star.text.TextTable" )
    table.initialize(4,3)
    text.insertTextContent( cursor, table, 0 )
    rows = table.Rows
    table.setPropertyValue( "BackTransparent", uno.Bool(0) )
    table.setPropertyValue( "BackColor", 1783434 )
    row = rows.getByIndex(0)
    row.setPropertyValue( "BackTransparent", uno.Bool(0) )
    row.setPropertyValue( "BackColor", 6710932 )
    textColor = 1231231
    insertTextIntoCell( table, "A1", "Python", textColor )
    insertTextIntoCell( table, "B1", "Java", textColor )
    insertTextIntoCell( table, "C1", "C++", textColor )
    table.getCellByName("A2").setString("T")
    table.getCellByName("A3").setString("F")
    table.getCellByName("A4").setString("F")
    table.getCellByName("B2").setString("T")
    table.getCellByName("B3").setString("T")
    table.getCellByName("B4").setString("F")
    table.getCellByName("C2").setString("T")
    table.getCellByName("C3").setString("F")
    table.getCellByName("C4").setString("T")
    cursor.setPropertyValue( "CharColor", 255 )
    cursor.setPropertyValue( "CharShadowed", uno.Bool(1) )
    text.insertControlCharacter( cursor, PARAGRAPH_BREAK, 0 )
```

Wynik:

Tabela

Python	Java	C++
T	T	T
F	T	F
F	F	T

Zad 4:

```
"""
Przyklad sumuje wartości znajdujace się w kolunie A,
potem sumuje wartości znajdujace się w kolunie B,
następnie odejmuje od siebie oba rekordy izapisuje wykik w C5.
"""
def VOL(a, b, c, d):
```

```
    v = a+b+c+d
    return v
def VOL2(a, b):
    v = a-b
    return v
def call_vol():
    doc = XSCRIPTCONTEXT.getDocument()
    cell = doc.Sheets[0]['A1']
    cell2 = doc.Sheets[0]['A2']
    cell3 = doc.Sheets[0]['A3']
    cell4 = doc.Sheets[0]['A4']
    cell5 = doc.Sheets[0]['B1']
    cell6 = doc.Sheets[0]['B2']
    cell7 = doc.Sheets[0]['B3']
    cell8 = doc.Sheets[0]['B4']
    cell_result = doc.Sheets[0]['A5']
    cell_result2 = doc.Sheets[0]['B5']
    cell_result3 = doc.Sheets[0]['C5']
    cell_result.setValue(
        VOL(
            cell.getValue(),
            cell2.getValue(),
            cell3.getValue(),
            cell4.getValue(),
            ))
    cell_result2.setValue(
        VOL(
            cell5.getValue(),
            cell6.getValue(),
            cell7.getValue(),
            cell8.getValue(),
            ))
    cell_result3.setValue(
        VOL2(
            cell_result.getValue(),
            cell_result2.getValue(),

            ))
```

Wynik:

	A	B	C
1	5	1	
2	6	2	
3	7	3	
4	8	4	
5	26	10	16

Zad 6:

```
import socket, uno
import tkinter as tk
from tkinter import *
from com.sun.star.text.ControlCharacter import PARAGRAPH_BREAK
def config_window():
window.title("Makra")
    width = 240
    height= 240
    ws = window.winfo_screenwidth()
    hs = window.winfo_screenheight()
    x = (ws/2) - (width/2)
    y = (hs/2) - (height/2)
    window.geometry('%dx%d+%d+%d' % (width, height, x, y))
    window.resizable(False, False)
def main_function():
    localContext = uno.getComponentContext()
    resolver =
localContext.ServiceManager.createInstanceWithContext("com.sun.star.bridge.Un
oUrlResolver",
    localContext )
    ctx = resolver.resolve(
"uno:socket,host=localhost,port=2002;urp;StarOffice.ComponentContext" )
    smgr = ctx.ServiceManager
    desktop = smgr.createInstanceWithContext(
"com.sun.star.frame.Desktop",ctx)
    model = desktop.getCurrentComponent()
    tekst = StringVar(window)
    lbl1 = tk.Label(window, text="tekst")
    lbl1.grid(row=0, column=1, sticky=W)
    pole_tekst = tk.Entry(window, textvariable=tekst)
    pole_tekst.grid(row=0, column=2, sticky=W)
    text = model.Text
    cursor = text.createTextCursor()
def macro_text():
    text.insertString( cursor, tekst.get(), 0 )
```

```
text.insertControlCharacter( cursor, PARAGRAPH_BREAK, 0 )
ctx.ServiceManager
```