Lab 1 - Report

Students:

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1   Overview

2   Results

- Describe your solutions and results for exercises in the class.

Code of testing python language:

```python
import sys

def func_A(args):  1 usage
    print('Hello ' + args[0] + ' and ' + args[1])

def func_B(a, b):  1 usage
    return a ** b
def main(args):  1 usage
    print("Arguments passed to the script:", args)
    if(args[1].isdigit()):
        print(func_B(int(args[0]), int(args[1])))
    else:
        func_A(args)


if __name__ == "__main__":
    main(sys.argv[1:])
```
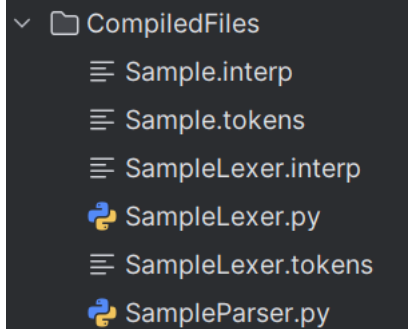
Result:

```
PS C:\Source\PPL\Lab1> python demo.py Ngan Huy
Arguments passed to the script: ['Ngan', 'Huy']
Hello Ngan and Huy
PS C:\Source\PPL\Lab1> python demo.py 24 2
Arguments passed to the script: ['24', '2']
576
```

Explain : According to the code, it will get the input from the terminal. If those inputs are number, which is checked by isdigit() function, it will run the func_B(a,b) and calculate the power a of b. Otherwise, it will print "Hello .. and …" with args[0] and args[1] are the input from the terminal.

Run python run.py gen:

```
PS C:\Source\PPL\code ANTLR> python run.py gen
Complete jar file ANTLR  :  C:/Program Files/antlr/antlr4-4.9.2-complete.jar
Antlr4 is running...
Generate successfully
```

CompiledFiles
- Sample.interp
- Sample.tokens
- SampleLexer.interp
- SampleLexer.py
- SampleLexer.tokens
- SampleParser.py

Explain:

```python
17    def generateAntlr2Python():  1 usage
18        print('Antlr4 is running...')
19        subprocess.run(['java', '-jar', ANTLR_JAR, '-o', CPL_Dest, '-no-listener', '-Dlanguage=Python3', SRC])
20        print('Generate successfully')
```