Secure Coding -Lab6

T.Venkata Sumanth
18BCE7271

03/03/21
L39 +L40

Questions :

1.
   - Write a python script to get all the file names in the current directory

2.
   - Write a python script to get all the directory names in the current directory

3
   - Write a python script to get all the directory and subdirectory names in the current directory

4
   - Write a python script to get all the file name, directory and all the subdirectory names (recursively) in the current directory

5
   - Write a python script to get all the file name, directory and all the subdirectory names (recursively) in the current drive and write it to a text file.

6
   - Write a python script which creates four new files in the current directory using Powershell.

1.

PYTHON SCRIPT :

```
import os
for root, dirs, files in os.walk("."):
    for filename in files:
        print(filename)
```

OUTPUT :

```
PS C:\Users\My Pc\18bce7271> python ex1.py
%server.java
192.165.55.104
acsnmap.txt
chatclient.class
chatclient.java
chatserver.class
chatserver.java
client.class
client.java
clientbi.class
clientbi.java
clientbi.txt
data.txt
DateClient.class
DateClient.java
DateServer.class
DateServer.java
edureka.in
ex1.py
google.com
hello.py
hello.spec
MyClient.class
MyServer.class
nmap.org
server.class
server.java
serverbi.class
serverbi.java
serverui.class
serverui.java
tesmint.com
udpclient.class
udpclient.java
```

udpserver.class
udpserver.java
vitap.ac.in
Analysis-00.toc
base_library.zip
EXE-00.toc
hello.exe.manifest
PKG-00.pkg
PKG-00.toc
PYZ-00.pyz
PYZ-00.toc
Tree-00.toc
Tree-01.toc
Tree-02.toc
warn-hello.txt
xref-hello.html
ss9.doc
hello.cpython-39.pyc

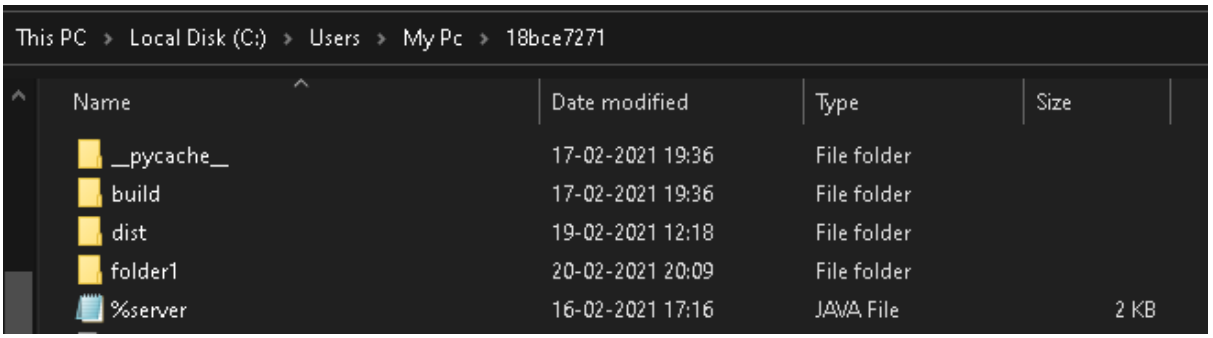
2.

Python Script :

```
import os
directory_contents = os.listdir(".")
for item in directory_contents:
    if os.path.isdir(item):
        print(item)
```

Output :

```
PS C:\Users\My Pc\18bce7271> python ex2.py
build
dist
folder1
__pycache__
```

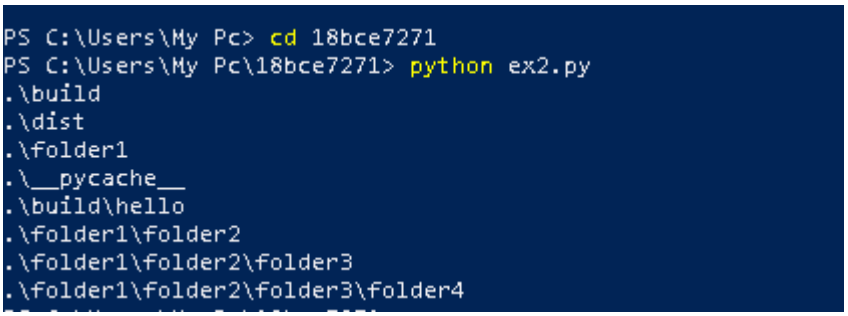


3.

Python script :

```
import os
for root, dirs, files in os.walk("."):
    for name in dirs:
        print (os.path.join(root, name))
```

Output :



4.

Python script :

```
import os
def recursive(dir, ext):
    subfolders, files = [], []

    for f in os.scandir(dir):
        if f.is_dir():
            subfolders.append(f.path)
            print(f)
        if f.is_file():
                files.append(f.path)
                print(f)


    for dir in list(subfolders):
        sf, f = recursive(dir, ext)
        subfolders.extend(sf)
        files.extend(f)
    return subfolders, files


subfolders, files = recursive(".", ["."])
```

Output :

Executed successfully

```
PS C:\Users\My Pc\18bce7271> python ex4.py
PS C:\Users\My Pc\18bce7271>
```

<DirEntry '%server.java'>
<DirEntry '192.165.55.104'>
<DirEntry 'acsnmap.txt'>
<DirEntry 'build'>
<DirEntry 'chatclient.class'>
<DirEntry 'chatclient.java'>
<DirEntry 'chatserver.class'>
<DirEntry 'chatserver.java'>
<DirEntry 'client.class'>
<DirEntry 'client.java'>
<DirEntry 'clientbi.class'>
<DirEntry 'clientbi.java'>
<DirEntry 'clientbi.txt'>
<DirEntry 'data.txt'>
<DirEntry 'DateClient.class'>
<DirEntry 'DateClient.java'>
<DirEntry 'DateServer.class'>
<DirEntry 'DateServer.java'>
<DirEntry 'direct.txt'>
<DirEntry 'dist'>
<DirEntry 'edureka.in'>
<DirEntry 'ex1.py'>
<DirEntry 'ex2.py'>
<DirEntry 'ex3.py'>
<DirEntry 'ex4.py'>
<DirEntry 'ex4.txt'>
<DirEntry 'folder1'>
<DirEntry 'google.com'>
<DirEntry 'hello.py'>
<DirEntry 'hello.spec'>
<DirEntry 'MyClient.class'>
<DirEntry 'MyServer.class'>
<DirEntry 'nmap.org'>
<DirEntry 'server.class'>
<DirEntry 'server.java'>
<DirEntry 'serverbi.class'>
<DirEntry 'serverbi.java'>
<DirEntry 'serverui.class'>
<DirEntry 'serverui.java'>
<DirEntry 'tesmint.com'>
<DirEntry 'tf.csv'>
<DirEntry 'udpclient.class'>
<DirEntry 'udpclient.java'>

```
<DirEntry 'udpserver.class'>
<DirEntry 'udpserver.java'>
<DirEntry 'vitap.ac.in'>
<DirEntry '__pycache__'>
<DirEntry 'hello'>
<DirEntry 'Analysis-00.toc'>
<DirEntry 'base_library.zip'>
<DirEntry 'EXE-00.toc'>
<DirEntry 'hello.exe.manifest'>
<DirEntry 'PKG-00.pkg'>
<DirEntry 'PKG-00.toc'>
<DirEntry 'PYZ-00.pyz'>
<DirEntry 'PYZ-00.toc'>
<DirEntry 'Tree-00.toc'>
<DirEntry 'Tree-01.toc'>
<DirEntry 'Tree-02.toc'>
<DirEntry 'warn-hello.txt'>
<DirEntry 'xref-hello.html'>
<DirEntry 'folder2'>
<DirEntry 'folder3'>
<DirEntry 'folder4'>
<DirEntry 'ss9.doc'>
<DirEntry 'hello.cpython-39.pyc'>
```

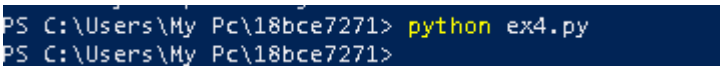
5.

Python Script:

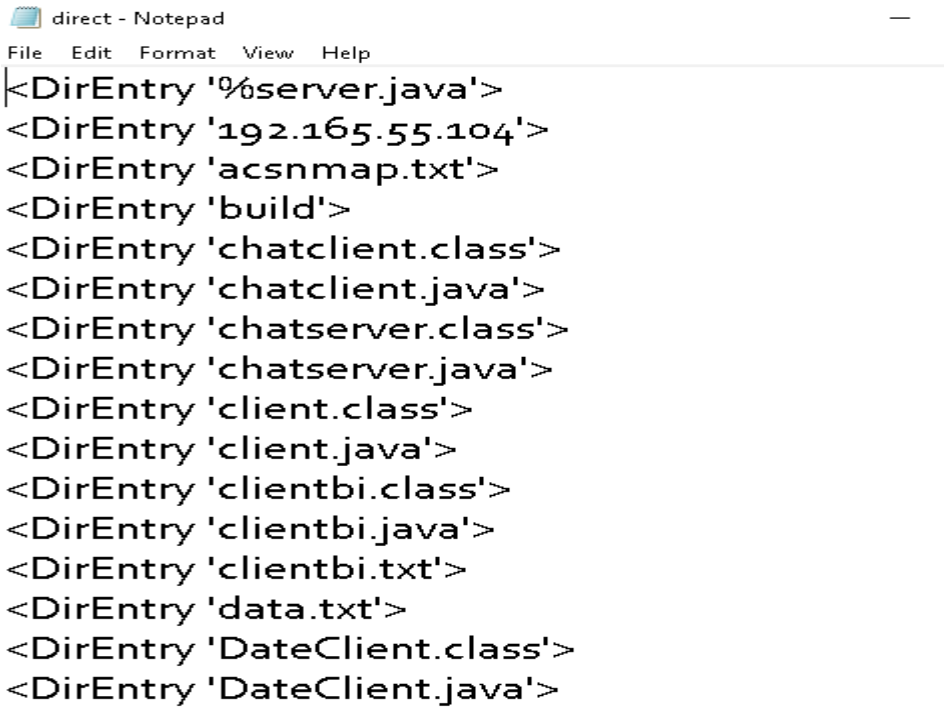
```
import os
def recursive(dir, ext):
    subfolders, files = [], []
    for f in os.scandir(dir):
        if f.is_dir():
            subfolders.append(f.path)
            with open('direct.txt', 'a') as g:
                    print(f,file=g)
        if f.is_file():
                files.append(f.path)
                with open('direct.txt', 'a') as g:
                    print(f,file=g)
    for dir in list(subfolders):
        sf, f = recursive(dir, ext)
        subfolders.extend(sf)
        files.extend(f)
    return subfolders, files


subfolders, files = recursive(".", ["."])
```

Output:

Executed successfully



we got all the files in the text file



<DirEntry '%server.java'>
<DirEntry '192.165.55.104'>
<DirEntry 'acsnmap.txt'>
<DirEntry 'build'>
<DirEntry 'chatclient.class'>
<DirEntry 'chatclient.java'>
<DirEntry 'chatserver.class'>
<DirEntry 'chatserver.java'>
<DirEntry 'client.class'>
<DirEntry 'client.java'>
<DirEntry 'clientbi.class'>
<DirEntry 'clientbi.java'>
<DirEntry 'clientbi.txt'>
<DirEntry 'data.txt'>
<DirEntry 'DateClient.class'>
<DirEntry 'DateClient.java'>
<DirEntry 'DateServer.class'>
<DirEntry 'DateServer.java'>

<DirEntry 'direct.txt'>
<DirEntry 'dist'>
<DirEntry 'edureka.in'>
<DirEntry 'ex1.py'>
<DirEntry 'ex2.py'>
<DirEntry 'ex3.py'>
<DirEntry 'ex4.py'>
<DirEntry 'ex4.txt'>
<DirEntry 'folder1'>
<DirEntry 'google.com'>
<DirEntry 'hello.py'>
<DirEntry 'hello.spec'>
<DirEntry 'MyClient.class'>
<DirEntry 'MyServer.class'>
<DirEntry 'nmap.org'>
<DirEntry 'server.class'>
<DirEntry 'server.java'>
<DirEntry 'serverbi.class'>
<DirEntry 'serverbi.java'>
<DirEntry 'serverui.class'>
<DirEntry 'serverui.java'>
<DirEntry 'tesmint.com'>
<DirEntry 'tf.csv'>
<DirEntry 'udpclient.class'>
<DirEntry 'udpclient.java'>
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<DirEntry 'udpserver.java'>
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<DirEntry 'hello'>
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<DirEntry 'base_library.zip'>
<DirEntry 'EXE-00.toc'>
<DirEntry 'hello.exe.manifest'>
<DirEntry 'PKG-00.pkg'>
<DirEntry 'PKG-00.toc'>
<DirEntry 'PYZ-00.pyz'>
<DirEntry 'PYZ-00.toc'>
<DirEntry 'Tree-00.toc'>
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<DirEntry 'Tree-02.toc'>
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<DirEntry 'xref-hello.html'>
<DirEntry 'folder2'>
<DirEntry 'folder3'>
<DirEntry 'folder4'>
<DirEntry 'ss9.doc'>

<DirEntry 'hello.cpython-39.pyc'>
6.

(Giving Input in powershell)
Python Script :

```
import os
path="."
a=int(input("enter how many files :"))
for x in range(a):
    c=str(x)
    file ='myfile'+c+'.txt'
    b=open(os.path.join(path, file), 'w')
    print(file,"created")
```

Output :

```
PS C:\Users\My Pc\18bce7271> python ex4.py
enter how many files :4
myfile0.txt created
myfile1.txt created
myfile2.txt created
myfile3.txt created
PS C:\Users\My Pc\18bce7271>
```

(without giving input in powershell)
Python Script :

```
import  subprocess
process = subprocess.Popen(["powershell","New-Item
18BCE7271_FILE4.txt,18BCE7271_FILE5.txt,18BCE7271_FILE6.txt,18BCE7271_FILE
7.txt"
],stdout=subprocess.PIPE)
result=process.communicate()[0]
print(result)
```

Output:

```
PS C:\Users\My Pc\18bce7271> python sum.py
b'\r\n\r\n    Directory: C:\\Users\\My Pc\\18bce7271\r\n\r\n\r\nMode                 LastWriteTime         Length Name
                                                                \r\n----                 -------------         ------ ---
-                                                                  \r\n-a----         06-03-2021     18:57              0
18BCE7271_FILE4.txt                                                   \r\n-a----         06-03-2021     18:57
 0 18BCE7271_FILE5.txt                                                   \r\n-a----         06-03-2021     18:57
    0 18BCE7271_FILE6.txt                                                   \r\n-a----         06-03-2021     18:57
       0 18BCE7271_FILE7.txt                                                   \r\n\r\n\r\n'
PS C:\Users\My Pc\18bce7271>
```