



CSE-2010 Secure Coding Lab[Slot- L23-L24]

LAB - 6

Name :- Tarun Kashyap

Reg. No. :- 18BCD7183

Assignment

- Write a python script to get all the file names in the current directory
- Write a python script to get all the directory names in the current directory
- Write a python script to get all the directory and subdirectory names in the current directory
- Write a python script to get all the file name, directory and all the subdirectory names (recursively) in the current directory
- 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.
- Write a python script which creates four new files in the current directory using Powershell.

Question 1 code:

```
import glob
```

```
files = [f for f in glob.glob(path + "**/*.py", recursive=True)]
for f in files:
    print(f)
```

Output:



```
C:\Shell102
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79700, Feb 19 2021, 13:44:55) [MSC v.1920 64 bit (AMD64)] on win32
Type "help", "copyright()", "credits()" or "license()" for more information.
>>>
===== RESTART: C:\Users\Lenovo\Desktop\hacktool.py =====
C:\Users\Lenovo\Downloads\123456789.doc
C:\Users\Lenovo\Downloads\19837114_NetworkFlow.pdf
C:\Users\Lenovo\Downloads\19837114_LAB 12.pdf
C:\Users\Lenovo\Downloads\19837114_Lab100.docx.pdf
C:\Users\Lenovo\Downloads\19837114_Lab100.pdf
C:\Users\Lenovo\Downloads\19837114_Lab1100.pdf
C:\Users\Lenovo\Downloads\19837114_Lab1200.pdf
C:\Users\Lenovo\Downloads\19837114_Lab200.pdf
C:\Users\Lenovo\Downloads\19837114_Lab300.pdf
C:\Users\Lenovo\Downloads\19837114_Lab400.pdf
C:\Users\Lenovo\Downloads\19837114_Lab500.pdf
C:\Users\Lenovo\Downloads\19837114_Lab600.pdf
C:\Users\Lenovo\Downloads\19837114_Lab700.pdf
C:\Users\Lenovo\Downloads\19837114_Lab800.pdf
C:\Users\Lenovo\Downloads\19837114_Lab900.pdf
C:\Users\Lenovo\Downloads\19837114_Lab 8 (1).pdf
C:\Users\Lenovo\Downloads\19837114_Lab 8.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001049_Experiment-10.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001049_Experiment-11.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001049_Experiment-12.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001049_Experiment-4.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001049_Experiment-5.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001049_Experiment-6.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001049_Experiment-7.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001076_Experiment-10.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001076_Experiment-11.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001076_Experiment-12.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001076_Experiment-2.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001076_Experiment-3.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001076_Experiment-4.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001076_Experiment-5.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001076_Experiment-6.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001076_Experiment-7.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001087_Experiment-5.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001104_Experiment-1.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001104_Experiment-2.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001104_Experiment-3.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001104_Experiment-4.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001104_Experiment-5.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001104_Experiment-6.pdf
C:\Users\Lenovo\Downloads\19837114_AF020211001104_Experiment-7.pdf
```

Question 2 code:

```
import os

path = 'C:\\Users\\Lenovo\\Desktop'

folders=[]

os.listdir(path)
```

```
for root, dirnames, filenames in os.walk(path):
```

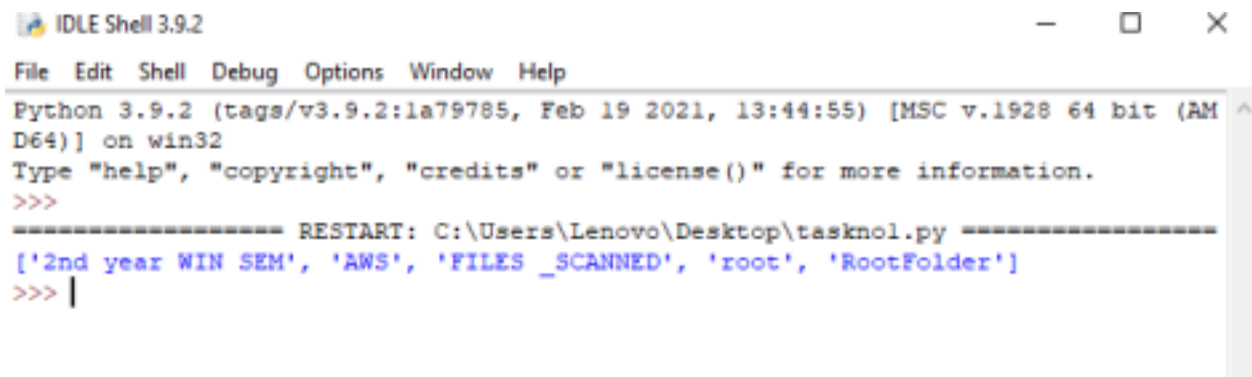
```
    folders.append(dirnames)
```

```
    break
```

```
for dirnames in folders:
```

```
    print(dirnames)
```

Output:

A screenshot of the IDLE Shell 3.9.2 window. The title bar says 'IDLE Shell 3.9.2'. The menu bar includes 'File', 'Edit', 'Shell', 'Debug', 'Options', 'Window', and 'Help'. The shell text shows the Python version and environment: 'Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32'. It prompts for help, copyright, credits, or license. The user has entered '>>>'. The output shows a restart of a script: '===== RESTART: C:\Users\Lenovo\Desktop\tasknol.py =====' followed by a list of folders: ['2nd year WIN SEM', 'AWS', 'FILES_SCANNED', 'root', 'RootFolder']. The prompt '>>>' is followed by a vertical bar cursor.

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Lenovo\Desktop\tasknol.py =====
['2nd year WIN SEM', 'AWS', 'FILES_SCANNED', 'root', 'RootFolder']
>>> |
```

QUESTION 3 code:

```
import os
```

```
path =
```

```
'C:\\Users\\Lenovo\\Desktop'
```

```
folders = []
```

r=root, d=directories, f = files

for r, d, f in os.walk(path):

for folder in d:

folders.append(os.path.join(r, folder))

for f in folders:

print(f)

OUTPUT:



```
Python 3.9.2 (tags/v3.9.3:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyrights", "credits" or "license()" for more information.
>>>
----- RESTART: C:/Users/Lenovo/Desktop/tasknoi.py -----
C:\Users\Lenovo\Desktop\Ind year WIN SEM
C:\Users\Lenovo\Desktop\AWS
C:\Users\Lenovo\Desktop\FILES _SCANNED
C:\Users\Lenovo\Desktop\root
C:\Users\Lenovo\Desktop\RootFolder
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Computer Arch and Org
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Computer Networks
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Computer Networks-LAB
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Database Management Systems
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Database Management Systems-LAB
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Secure Coding
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Secure Coding-Lab
C:\Users\Lenovo\Desktop\Ind year WIN SEM\SemaConductor devices
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Soft Computing
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Web Technologies
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Web Technologies-Lab
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Z-STS
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Computer Networks\Module 1
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Computer Networks\Module 2
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Web Technologies\CSS
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Web Technologies\JAVASCRIPT
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Web Technologies\JS DOM and others
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Web Technologies\JS session 2
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Web Technologies\JS DOM and others\attributes
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Web Technologies\JS DOM and others\document
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Web Technologies\JS DOM and others\DOM and CSS
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Web Technologies\JS DOM and others\More events
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Web Technologies\JS DOM and others\validation
C:\Users\Lenovo\Desktop\Ind year WIN SEM\Web Technologies\JS DOM and others\More events\elements
C:\Users\Lenovo\Desktop\root\sub1
C:\Users\Lenovo\Desktop\root\sub1\sub2
C:\Users\Lenovo\Desktop\root\sub1\sub2\sub3
C:\Users\Lenovo\Desktop\RootFolder\subfolder1
C:\Users\Lenovo\Desktop\RootFolder\subfolder1\subfolder2
>>>
```

Question 4 code:

import os

import glob

```
path = 'c:\\Users\\Lenovo\\Documents'
print(" Displaying All the files : \n")
files = [f for f in glob.glob(path + "**/*.\"", recursive=True)]
for f in files:
    print(f)
print("\n Displaying All the directories and sub directories :
\n") folders = []
for root, dirnames, f in os.walk(path):
    for folder in dirnames:
        folders.append(os.path.join(root, folder))
for f in folders:
    print(f)
```

OUTPUT:

```
IDLE Shell 3.9.2
File Edit Shell Debug Options Window Help
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
----- RESTART: C:\Users\Lenovo\Desktop\tasknol.py -----
Displaying All the files :

c:\Users\Lenovo\Documents\desktop.ini
c:\Users\Lenovo\Documents\hello.java
c:\Users\Lenovo\Documents\Hello.py
c:\Users\Lenovo\Documents\Hello.spec

Displaying All the directories and sub directories :

c:\Users\Lenovo\Documents\build
c:\Users\Lenovo\Documents\Custom Office Templates
c:\Users\Lenovo\Documents\dist
c:\Users\Lenovo\Documents\My Music
c:\Users\Lenovo\Documents\My Pictures
c:\Users\Lenovo\Documents\My Videos
c:\Users\Lenovo\Documents\R
c:\Users\Lenovo\Documents\Secure Coding Lab4
c:\Users\Lenovo\Documents\Virtual Machines
c:\Users\Lenovo\Documents\Zoom
c:\Users\Lenovo\Documents\__pycache__
c:\Users\Lenovo\Documents\build\Hello
c:\Users\Lenovo\Documents\R\win-library
c:\Users\Lenovo\Documents\R\win-library\3.5
c:\Users\Lenovo\Documents\R\win-library\4.0
c:\Users\Lenovo\Documents\R\win-library\3.5\class
c:\Users\Lenovo\Documents\R\win-library\3.5\cluster
c:\Users\Lenovo\Documents\R\win-library\3.5\mclust
c:\Users\Lenovo\Documents\R\win-library\3.5\class\help
c:\Users\Lenovo\Documents\R\win-library\3.5\class\html
c:\Users\Lenovo\Documents\R\win-library\3.5\class\libs
c:\Users\Lenovo\Documents\R\win-library\3.5\class\Meta
c:\Users\Lenovo\Documents\R\win-library\3.5\class\po
c:\Users\Lenovo\Documents\R\win-library\3.5\class\R
c:\Users\Lenovo\Documents\R\win-library\3.5\class\libs\i386
c:\Users\Lenovo\Documents\R\win-library\3.5\class\libs\x64

Ln: 136 Col: 4
```

Question 5 code:

```
import os
```

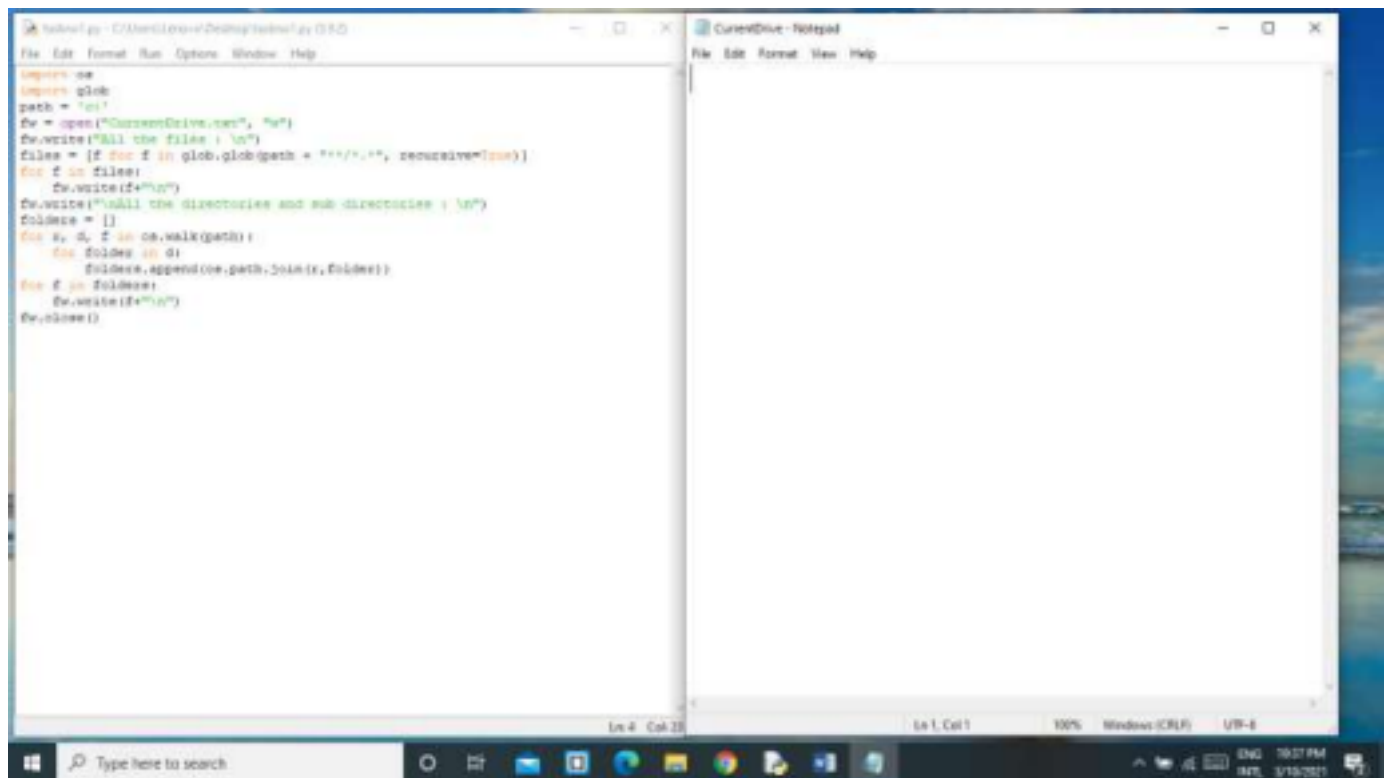
```
import glob
```

```
path = 'c:'
```

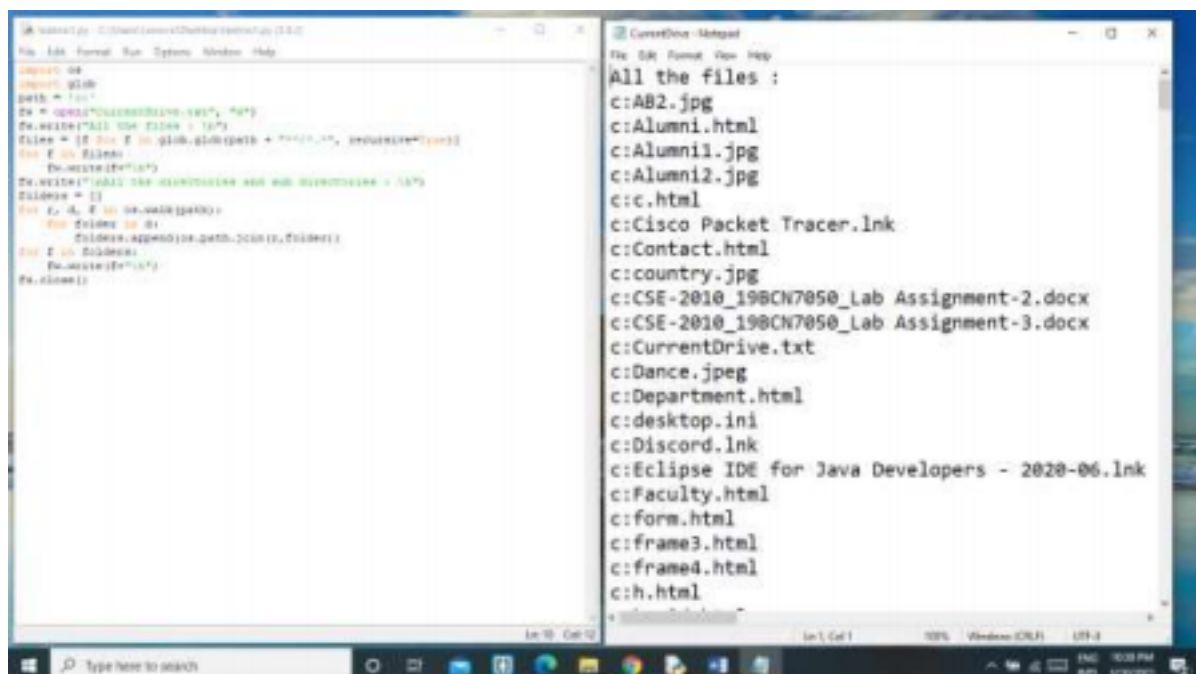
```
fw = open("CurrentDrive.txt", "w")
fw.write("All the files : \n")
files = [f for f in glob.glob(path + "**/*.\"", recursive=True)]
for f in files:
    fw.write(f+"\n")
fw.write("\nAll the directories and sub directories : \n")
folders = []
for root, dirnames, f in os.walk(path):
    for folder in dirnames:
        folders.append(os.path.join(root, folder))
for f in folders:
    fw.write(f+"\n")
fw.close()
```

Output:

Before Execution:



After execution:



Question 6:

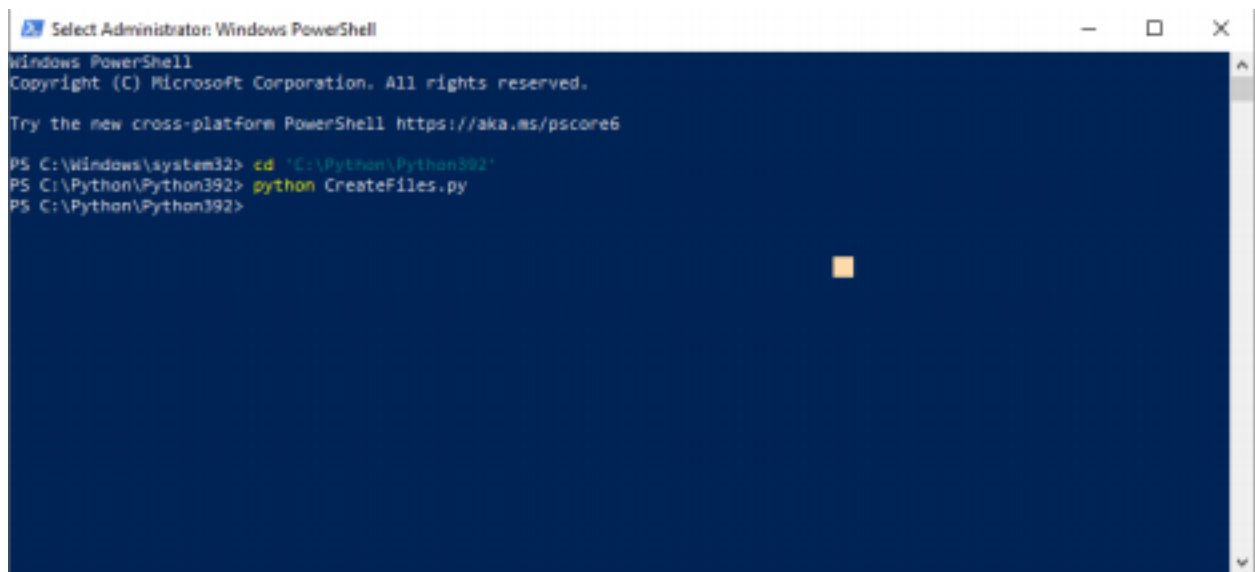
Python code:


```
list1 = ['a', 'b', 'c', 'd']
```

```
for i in range(len(list1)):
```

```
    open('file%s.txt' % i, 'w').write(list1[i])
```

Powershell execution:

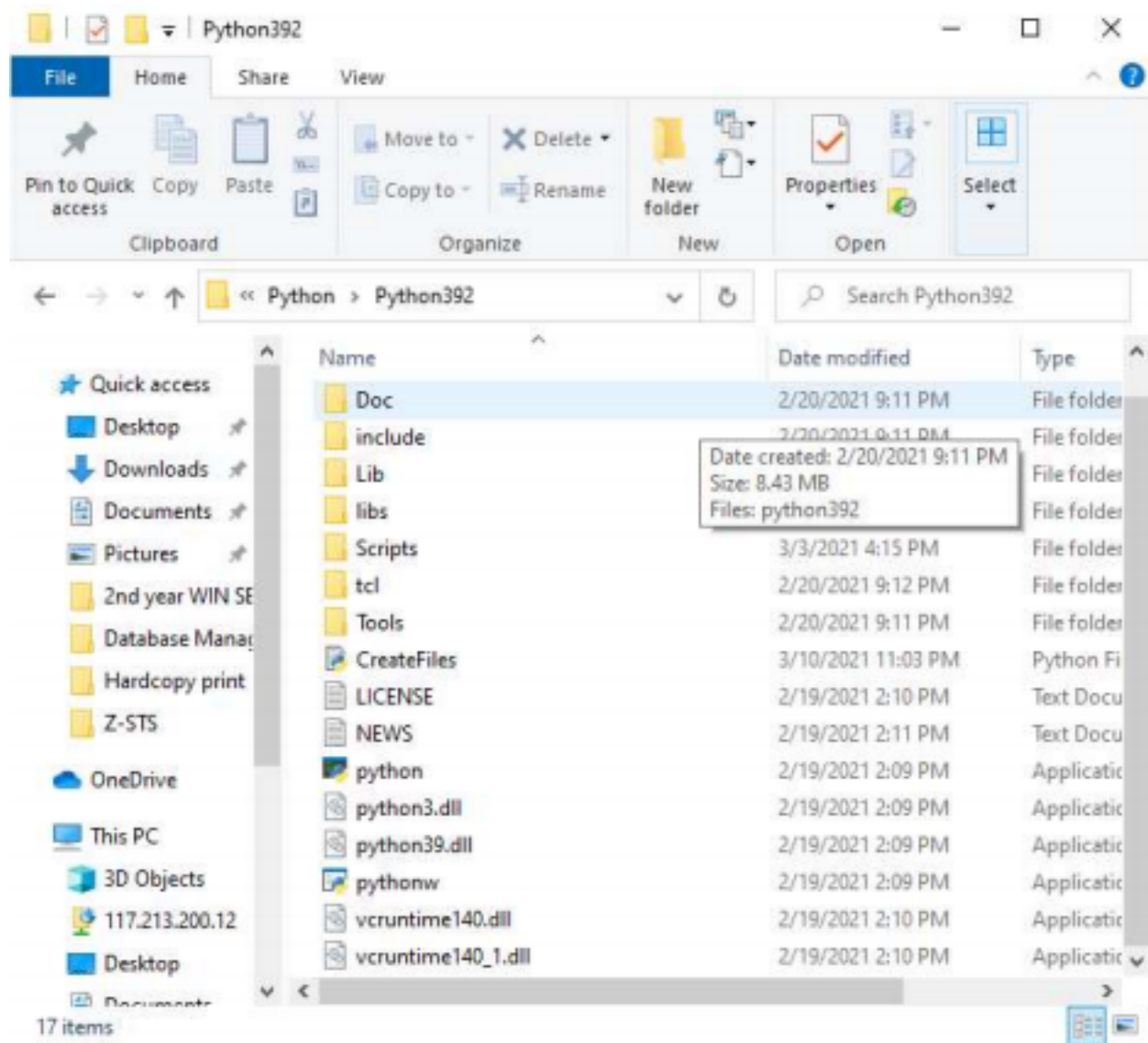
A screenshot of a Windows PowerShell window titled "Select Administrator: Windows PowerShell". The window has a dark blue background with white text. The text shows the PowerShell prompt and the execution of a Python script. The prompt is "PS C:\Windows\system32>". The first command is "cd 'C:\Python\Python392'", which is highlighted in green. The second command is "python CreateFiles.py", which is highlighted in yellow. The third command is "PS C:\Python\Python392>". There is a small orange cursor icon on the line "PS C:\Python\Python392>".

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Windows\system32> cd 'C:\Python\Python392'
PS C:\Python\Python392> python CreateFiles.py
PS C:\Python\Python392>
```

Output Before Execution:



Output After Execution:

