

SECURE CODING LAB

SLOT –L(23+24)

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LAB EXPERIMENT 6

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
```

```
path = 'C:\\\\Users\\Lenovo\\Downloads'
```

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

```
for f in files:
```

```
print(f)
```

Output:

```

C:\Users\Lenovo\Desktop>taskmol.py
Python 3.9.2 (tags/v3.9.2:1a79706, Feb 15 2021, 13:44:55) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
----- RESTART: C:/Users/Lenovo/Desktop/taskmol.py -----
C:\Users\Lenovo\Downloads\123456789.doc
C:\Users\Lenovo\Downloads\198CD7243_NetworkFlow.pdf
C:\Users\Lenovo\Downloads\198CD7244_LAB 12.pdf
C:\Users\Lenovo\Downloads\198CE7070_Lab1 00F.docx.pdf
C:\Users\Lenovo\Downloads\198CE7070_Lab10 00F.pdf
C:\Users\Lenovo\Downloads\198CE7070_Lab11 00F.pdf
C:\Users\Lenovo\Downloads\198CE7070_Lab12 00F.pdf
C:\Users\Lenovo\Downloads\198CE7070_Lab2 00F.pdf
C:\Users\Lenovo\Downloads\198CE7070_Lab3 00F.pdf
C:\Users\Lenovo\Downloads\198CE7070_Lab4 00F.pdf
C:\Users\Lenovo\Downloads\198CE7070_Lab5 00F.pdf
C:\Users\Lenovo\Downloads\198CE7070_Lab6 00F.pdf
C:\Users\Lenovo\Downloads\198CE7070_Lab7 00F.pdf
C:\Users\Lenovo\Downloads\198CE7070_Lab8 00F.pdf
C:\Users\Lenovo\Downloads\198CE7070_Lab9 00F.pdf
C:\Users\Lenovo\Downloads\198CT7044_Lab 0 (1).pdf
C:\Users\Lenovo\Downloads\198CT7044_Lab 8.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001049_Experiment-10.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001049_Experiment-11.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001049_Experiment-12.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001049_Experiment-4.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001049_Experiment-8.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001049_Experiment-9.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001074_Experiment-11.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001074_Experiment-12.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001074_Experiment-2.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001074_Experiment-3.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001074_Experiment-4.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001074_Experiment-5.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001074_Experiment-8.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001087_Experiment-5.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001104_Experiment-1.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001104_Experiment-2.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001104_Experiment-3.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001104_Experiment-4.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001104_Experiment-6.pdf
C:\Users\Lenovo\Downloads\198CF7114_AF2020211001104_Experiment-6.pdf

```

Question 2 code:

```
import os

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

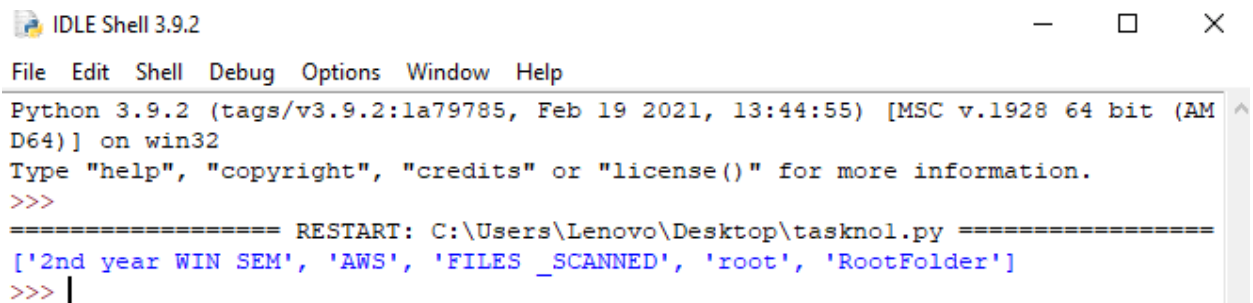
folders=[]

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 window title is "IDLE Shell 3.9.2". The menu bar includes "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The shell displays the following text: "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.", and three prompt lines ">>>". The first prompt line is followed by a multi-line string output: "==== RESTART: C:\\Users\\Lenovo\\Desktop\\tasknol.py =====", "['2nd year WIN SEM', 'AWS', 'FILES_SCANNED', 'root', 'RootFolder']", and another prompt line ">>> |".

```
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/v3.9.2:1a79785, 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/tasknoi.py -----
C:\Users\Lenovo\Desktop\2nd 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\2nd year WIN SEM\Computer Arch and Org
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Computer Networks
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Computer Networks-LAB
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Database Management Systems
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Database Management Systems-LAB
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Secure Coding
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Secure Coding-Lab
C:\Users\Lenovo\Desktop\2nd year WIN SEM\SemiConductor devices
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Soft Computing
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Web Technologies
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Web Technologies-Lab
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Z-STS
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Computer Networks\Module 1
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Computer Networks\Module 2
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Web Technologies\CSS
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Web Technologies\JAVASCRIPT
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Web Technologies\JS DOM and others
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Web Technologies\JS session 2
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Web Technologies\JS DOM and others\attributes
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Web Technologies\JS DOM and others\document
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Web Technologies\JS DOM and others\DOM and CSS
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Web Technologies\JS DOM and others\More events
C:\Users\Lenovo\Desktop\2nd year WIN SEM\Web Technologies\JS DOM and others\validation
C:\Users\Lenovo\Desktop\2nd 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\sub1\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 :

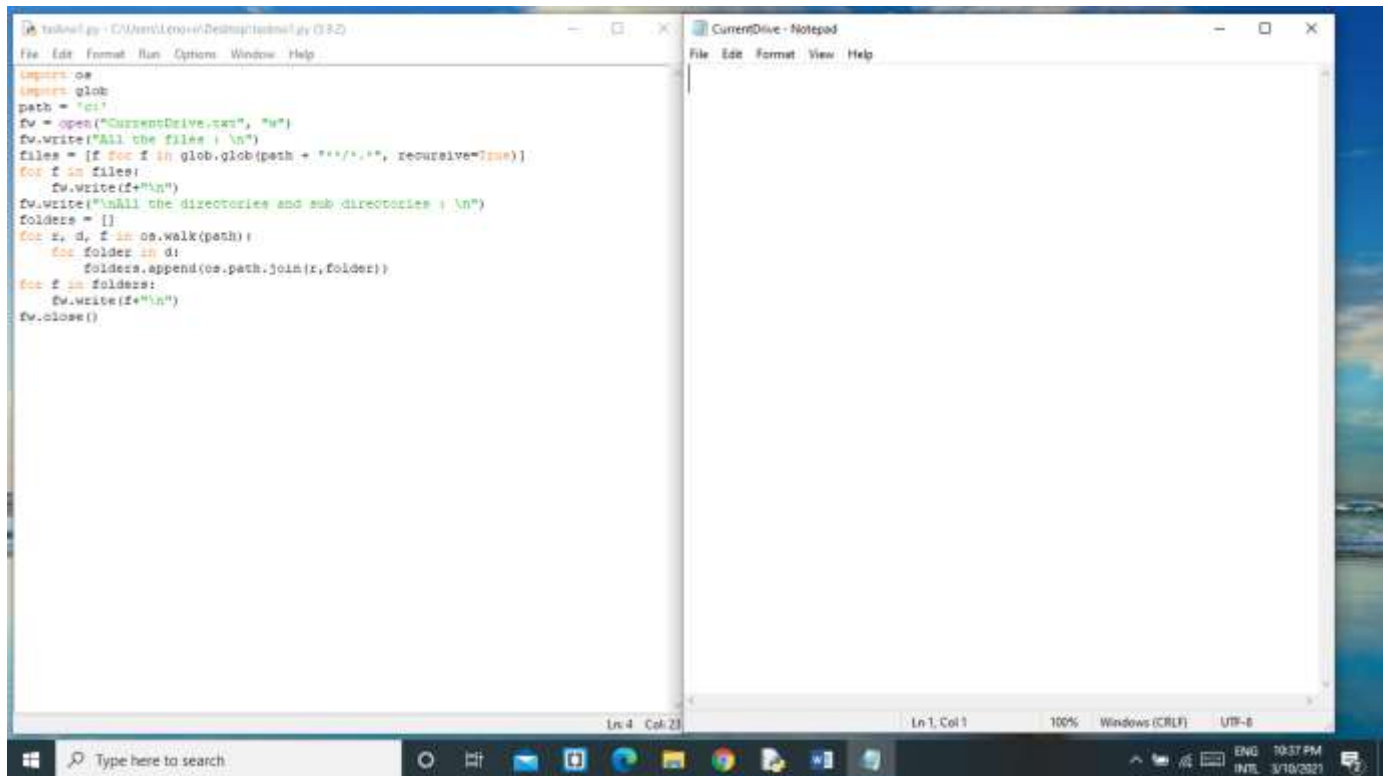
c:\Users\Lenovo\Documents\build
c:\Users\Lenovo\Documents\Custom Office Templates
c:\Users\Lenovo\Documents\dist
c:\Users\Lenovo\Documents\My Music
c:\Users\Lenovo\Documents\My Pictures
c:\Users\Lenovo\Documents\My Videos
c:\Users\Lenovo\Documents\R
c:\Users\Lenovo\Documents\Secure Coding Lab4
c:\Users\Lenovo\Documents\Virtual 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:

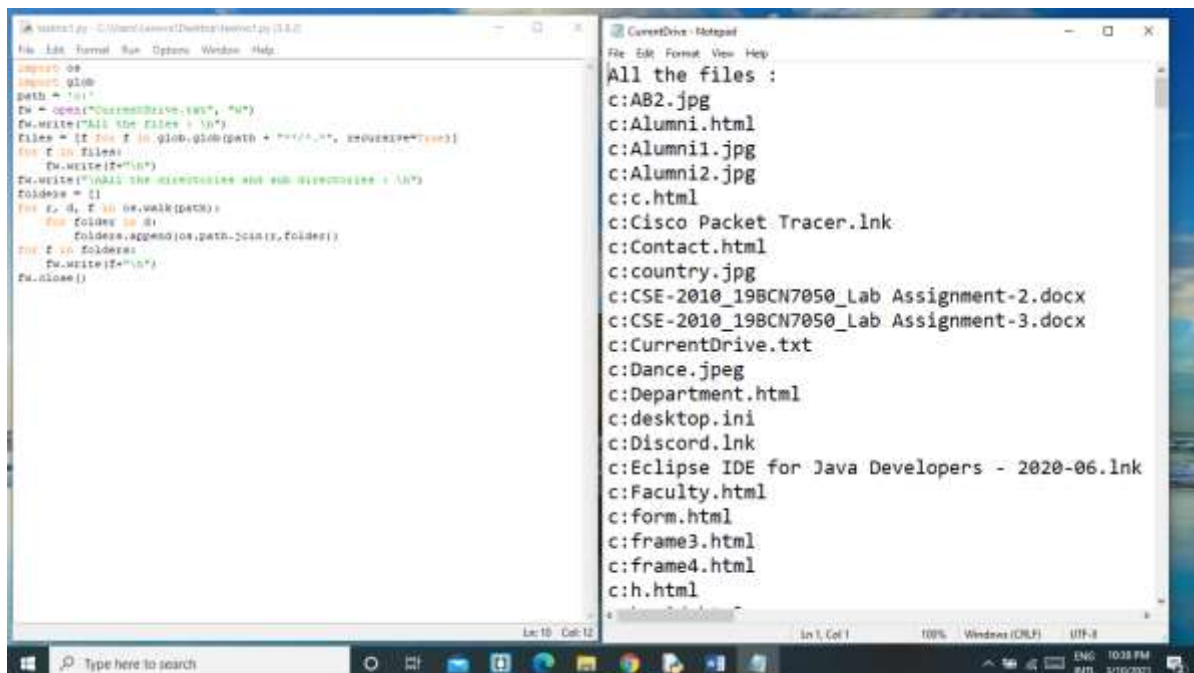
```
import os
import glob
path = 'c:'
fw = open("CurrentDrive.txt", "w")
fw.write("All the files : \n")
files = [f for f in glob.glob(path + "**/*.\"", recursive=True)]
for f in files:
    fw.write(f+"\n")
fw.write("\nAll the directories and sub directories : \n")
folders = []
for root, dirnames, f in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

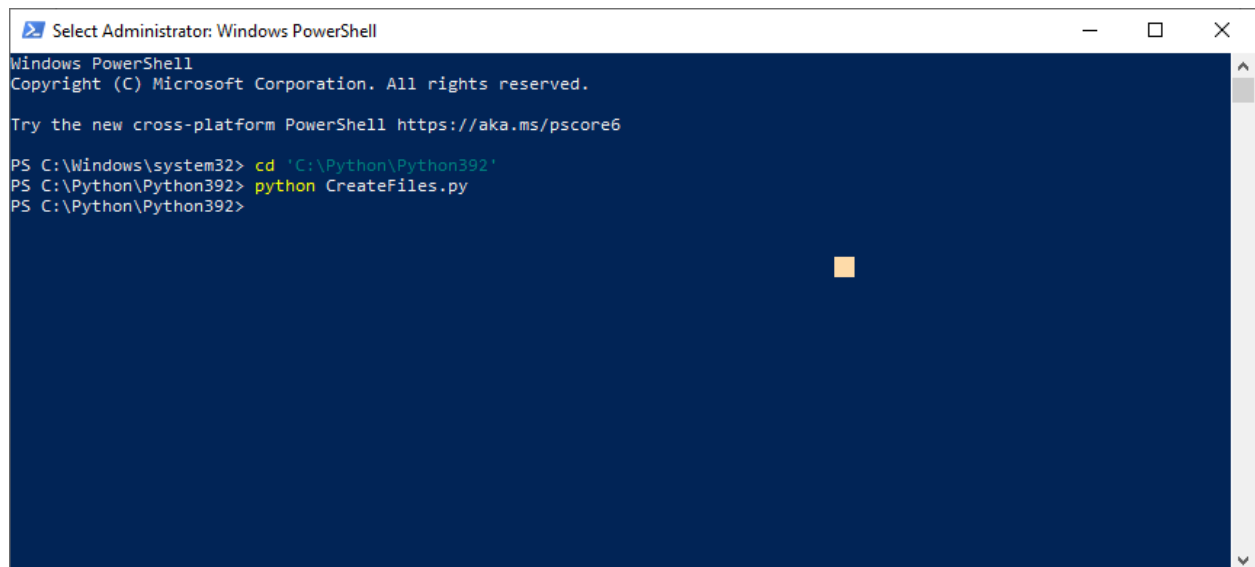
Python code:

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

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

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

Powershell execution:

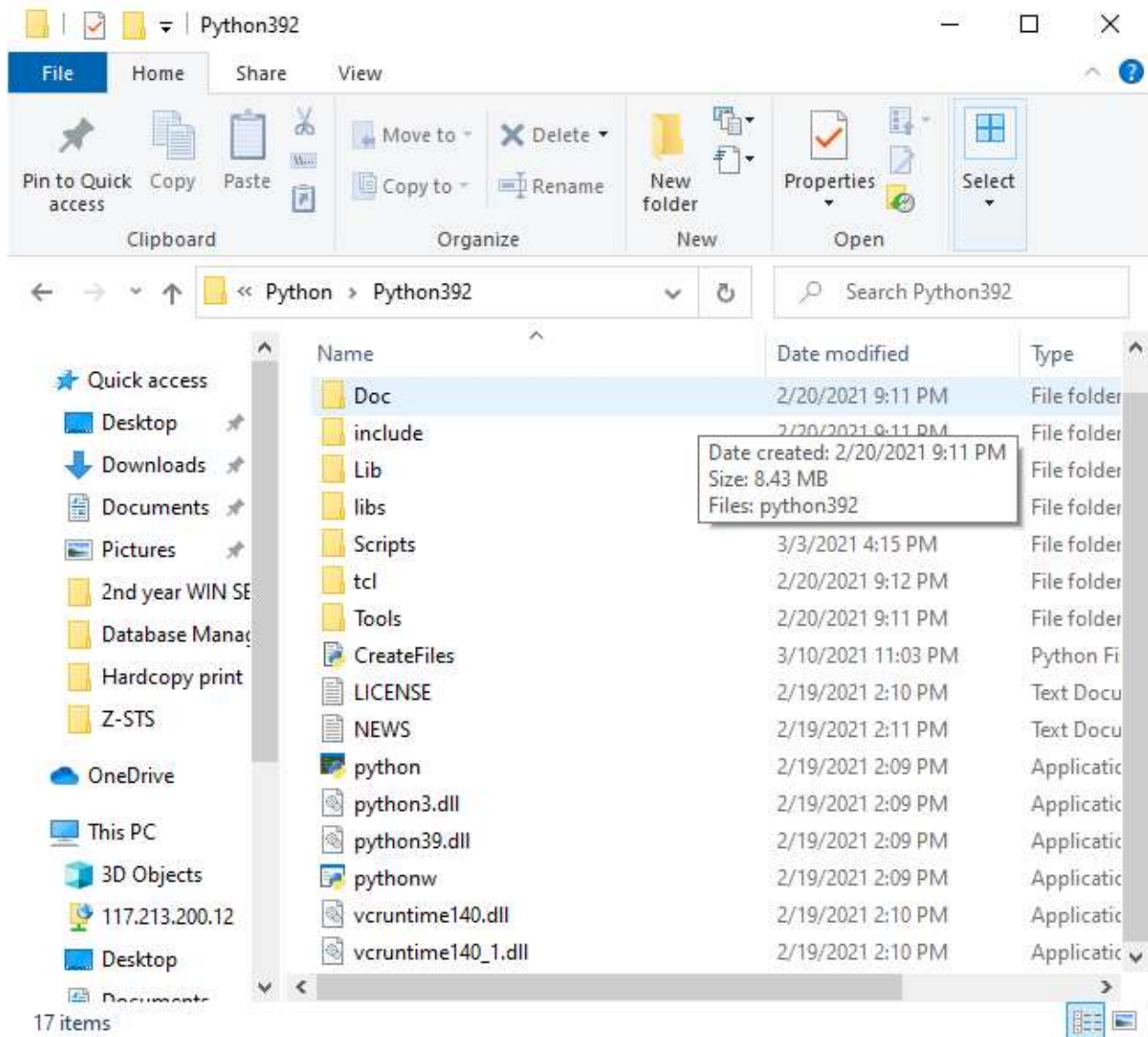
A screenshot of a Windows PowerShell window titled "Select Administrator: Windows PowerShell". The window has a dark blue background with white text. The text shows the PowerShell prompt and the execution of a Python script. The prompt is "PS C:\Windows\system32>". The command entered is "cd 'C:\Python\Python392'". The prompt changes to "PS C:\Python\Python392>". The command entered is "python CreateFiles.py". The prompt changes to "PS C:\Python\Python392>". There is a small orange cursor at the end of the last prompt.

```
Select Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

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:

