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## **Working with the memory vulnerabilities**

## 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

First we have to run the python script to generate payload.

```
C:\Windows\system32\cmd.exe

Microsoft Windows [Version 6.1.7601]

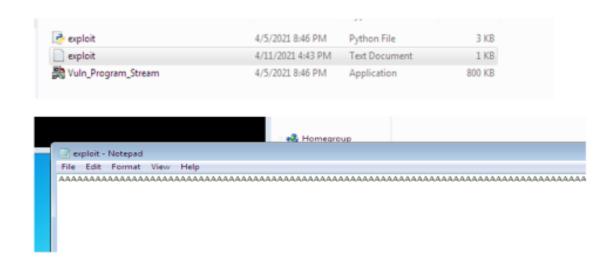
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Lifenest>cd desktop/vullln

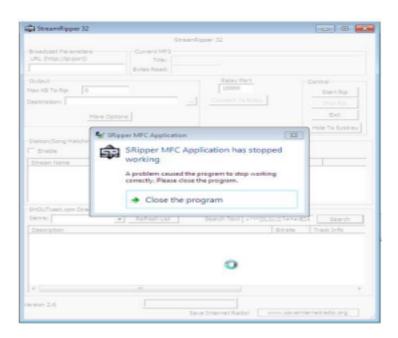
C:\Users\Lifenest\Desktop\Vullln>python exploit.py

C:\Users\Lifenest\Desktop\Vullln>
```

## Now a payload will generate as shown,



Now we open stream richer and insert payload then it crashes and command prompt will open



This happens because of the buffer overflow vulnerability

A buffer overflow occurs when the volume of data that is to be stored exceeds the storage capacity of the memory buffer. So , as a result the program attempting to write the data to buffer overwrites adjacent memory locations then as the data that to be stored in a particular memory location is stored in the adjacent memory locations also there occurs buffer overflow.