Bosch-TheThree

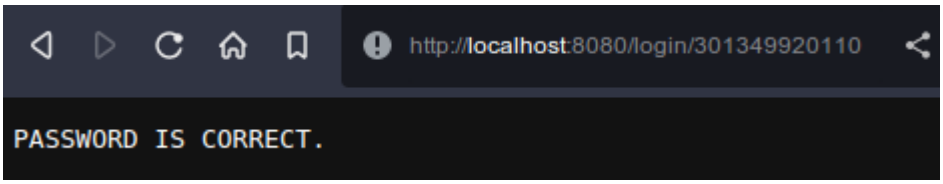
> Install "wine" if you in Linux and want to execute file `.exe`

Challenge 1:

- Run file `server.exe` and go to "http://localhost:8080/login/{password}".
- Solution:

```
KeyboardInterrupt
>>> key = '59365396979475976395213365160664101379746953923942732986521992190781833116522523281133013499201107164556693755808896388626579896838677671121697461582652476983983988912879745224517238022043874421786941815369105534844594043764096133275695082237828466448125 8'
>>> flag = ''
>>> for i in range (85, 97):
...     flag += a[i]
...
>>> flag
'301349920110'
>>>
```

- Check password



> The flag would be `301349920110`

Challenge 2:

- Run file `get-flag.exe` with the arguments is the name of the user
- Note that we reverse the file `get-flag.exe` and find this line

```
[ebp+10]:"Hello hello"
eax:", the flag is letter P (uppercase)."
23:'#'
```

> The flag would be `P`

Challenge 3:

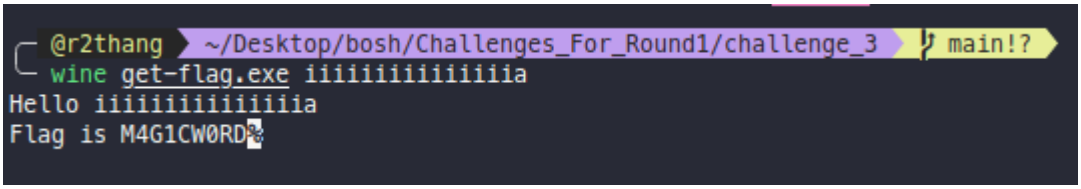
- Run file `get-flag.exe` with the arguments is the name of the user name
- Again, reverse the file `get-flag.exe` we got this

```
.data:00409000 ; Segment permissions: Read/Write
.data:00409000 _data           segment dword public 'DATA' use32
.data:00409000                 assume cs:_data
.data:00409000                 ;org 409000h
.data:00409000                 public _magicWord
.data:00409000 _magicWord      dd offset aM4g1cw0rd     ; DATA XREF: _main+84↑r
.data:00409000                                          ; "M4G1CW0RD"
.data:00409004                 public __CRT_glob
.data:00409004 __CRT_glob      dd 2                     ; DATA XREF: __mingw32_init_mai
.data:00409004                                          ; __setargv+9↑r ...
.data:00409008                 public __fmode
```

- Easy to buffer overflow by passing a string

```
get-flag.exe iiiiiiiiiiiiia
```

- It will be return the flag `Flag is M4G1CW0RD`



> The flag would be `M4G1CW0RD`

CHallenge 4:

- Run file `exploit.py`

> cat `exploit.py`

```
record = [{
    "plaintext": "001333b95c1edb3ef145a4a9f52f7b9a",
    "ciphertext": "bb28b7e3f49355b7a236ad2745d68cb25",
    "iv" : "70359350f329603f0da99a1f9151d844"
}]

from pwn import xor
p_1 = bytes.from_hex("001333b95c1edb3ef145a4a9f52f7b9a")
c_1 = bytes.from_hex("bb28b7e3f49355b7a236ad2745d68cb25")
c_2 = bytes.from_hex("fdfa29ef6547ef37a64a1bb2c629c5cc")

p_2 = xor(xor(c_1, c_2), p_1)

print(p_2)
```

> python `exploit.py`

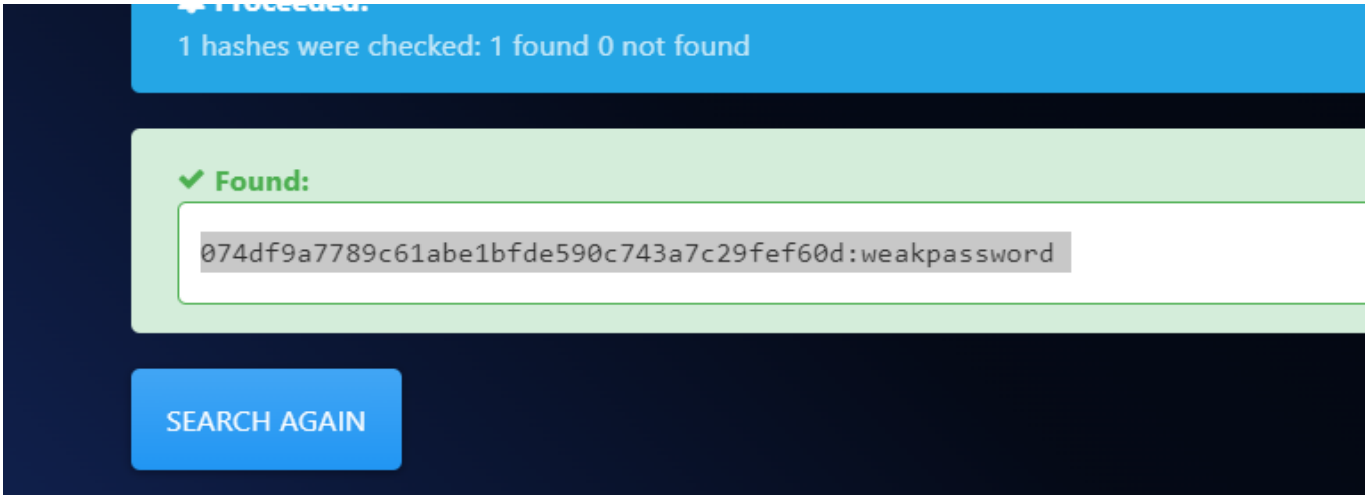
- The output would look like

```
b'Obdiplostemonnus'
```

> The flag would be `Obdiplostemonnus`

Challenge 5

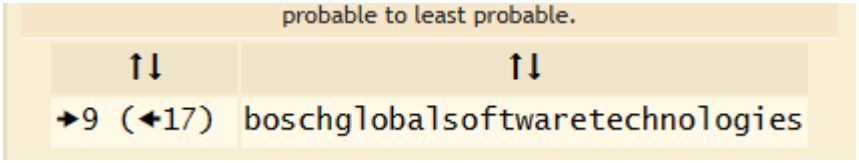
- SHA-1 digest of the flag is 0x074df9a7789c61abe1bfde590c743a7c29fef60d
- After reverse the given digest



> The flag would be `weakpassword`

Challenge 6

- The ciphertext is `kxblqpuxkjubxocfjancnlqwxuxprnb`
- After decrypting the ciphertext, we got



> The flag would be `boschglobalsoftwaretechnologies`