

Online 1: Buffer Overflow

Section: A2

Time: 35 minutes

You are given a file A2.c. Replace the <SZ1>, <SZ2>, <PARAM> values according to the given rules.

Craft a payload that, when **strcpy**-ed into buffer,

- first executes `foo()` with the given parameter
- then executes `bar()` **with the return value from `foo()`**
- Then executes `secret()`.

Don't change anything except the three macros.

Submit your exploit as `exploit.py`

Expected output (The value might differ for your case):

```
Foo says: 15
Bar sees: 15
You've reached secret()!
# whoami
root
#
```

`PARAM = 5 + <Your ID % 10>`

`SZ1 = 600 + <Last 3 digits of your ID> * 10`

`SZ2 = 100 + <Last 3 digits of your ID> * 5`

Use the following link to create assemble the instructions into raw hex:

<https://defuse.ca/online-x86-assembler.htm#disassembly>

Submit your `exploit.py` file only.