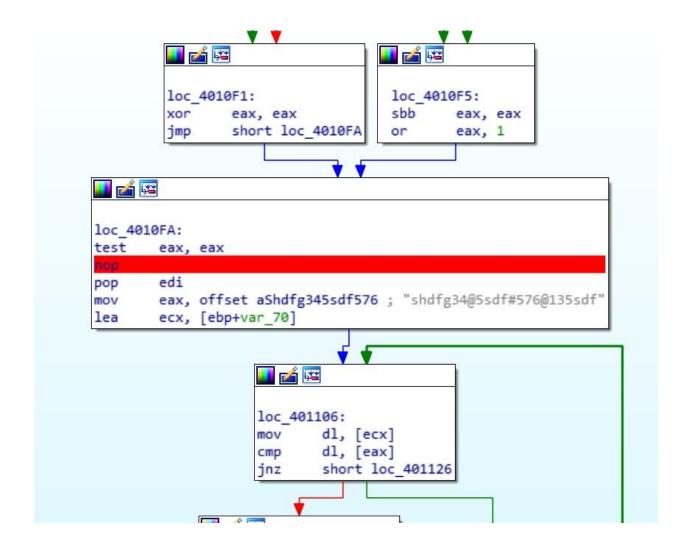
David Huang dhuan008@ucr.edu

Part 1:

Here's your flag:34gdfh340234

Changed the JNZ (opcode 75) to NOP (opcode 90). Highlighted in red. No instruction to goto incorrect username, so as long as there isn't a overflow or something we will always get the flag.. I did the same thing for password check.

Address	Original bytes	Patched bytes
00000000004010FC	75	90



Password - Same logic as above.

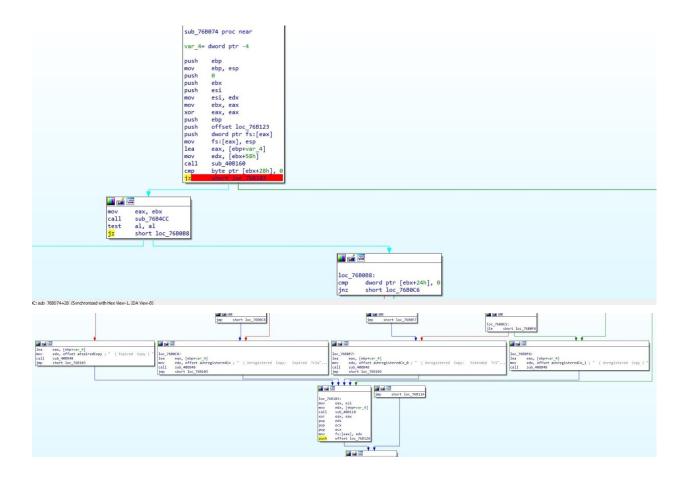
Address	Original bytes	Patched bytes
000000000040112D	75	90

```
eax, eax
                                     sbb
         xor
                                              eax, eax
                 short loc 40112B
         jmp
                                     or
                                              eax, 1
 🛮 🏄 🚾
loc 40112B:
test
        eax, eax
nop
daa
push
        offset aHereSYourFlag; "Here's your flag:"
call
        sub 401020
        offset a34gdfh340234 ; "34gdfh340234%\n"
push
call
        sub 401020
add
        esp, 8
xor
        eax, eax
mov
        ecx, [ebp+var 4]
xor
        ecx, ebp
        @ security check cookie@4; security check cookie(x)
call
        esp, ebp
mov
pop
        ebp
retn
```

Part 2.

I was actually searching for the trial period is over string when i found the location of the banner modification code which contains all of the Unregistered copy and Expired copy modifications. So i changed the code to bypass all of them. Technically i did it by reversing the comparison so since its a unregistered copy it wont show as unregistered. Jnz to jz.

Address	Original bytes	Patched bytes
00000000076B074	75	74



Afterwards I tried to remove the call to the trial popup but it seemed to always come back despite my changes, and the requirements stated that it was either the banner or the the reminder pop-up.