

```

unsigned int foo(char *buf,
                 unsigned int *out)
{
    unsigned int c;
    c = 0;
    if (buf) {
        *out = strlen(buf);
    }
    if (*out) {
        c = *out - 1;
    }
    return c;
}

```

(a) Source code

```

push    %ebp
mov     %esp,%ebp
sub     $0x28,%esp
movl    $0x0,-0xc(%ebp)
cmpl    $0x0,0x8(%ebp)
je      8048442 <foo+0x23>
mov     0x8(%ebp),%eax
mov     %eax,(%esp)
call    804831c <strlen@plt>
mov     0xc(%ebp),%edx
mov     %eax,(%edx)
mov     0xc(%ebp),%eax
mov     (%eax),%eax
test    %eax,%eax
je      8048456 <foo+0x37>
mov     0xc(%ebp),%eax
mov     (%eax),%eax
sub     $0x1,%eax
mov     %eax,-0xc(%ebp)
mov     -0xc(%ebp),%eax
leave
ret

```

(b) Disassembled code