

RevEnge Sprout 2018 Final Challenge

rcl:

var_18= dword ptr -18h
var_14= dword ptr -14h
var_4= dword ptr -4

```
push    rbp
mov     rbp, rsp
mov     [rbp+var_14], edi
mov     [rbp+var_18], esi
mov     [rbp+var_4], 0
jmp     short loc_40066F
```

```
loc_400659:
mov     eax, [rbp+var_18]
and     eax, 1
test    eax, eax
jz      short loc_400669
```

```
mov     eax, [rbp+var_14]
add     [rbp+var_4], eax
```

```
loc_400669:
shl     [rbp+var_14], 1
shr     [rbp+var_18], 1
```

```
loc_40066F:
cmp     [rbp+var_18], 0
jnz     short loc_400659
```

```
mov     eax, [rbp+var_4]
pop     rbp
retn
rcl endp      "rcl function end"
```

main:

var_14= dword ptr -14h
var_10= dword ptr -10h
var_C= dword ptr -0Ch
var_8= qword ptr -8

```
push    rbp
mov     rbp, rsp
sub     rsp, 20h
mov     rax, fs:28h
mov     [rbp+var_8], rax
xor     eax, eax
mov     edi, offset format ; "Enter UserID:"
mov     eax, 0
call    _printf
lea     rax, [rbp+var_14]
mov     rsi, rax
mov     edi, offset aD ; "%d"
mov     eax, 0
call    ___isoc99_scanf
mov     edi, offset aEnterPasscode ; "Enter Passcode:"
mov     eax, 0
call    _printf
lea     rax, [rbp+var_10]
mov     rsi, rax
mov     edi, offset aD ; "%d"
mov     eax, 0
call    ___isoc99_scanf
mov     eax, [rbp+var_14]
cmp     eax, 270Fh
jle     short loc_4006EF
```

```
mov     eax, [rbp+var_10]
cmp     eax, 270Fh
jg      short loc_400700
```

loc_4006EF:

```
mov     edi, offset s ; "Numbers are too small."
call    _puts
mov     eax, 0
jmp     short loc_400744
```

```
loc_400700:
mov     eax, [rbp+var_10]
mov     edx, eax
mov     eax, [rbp+var_14]
mov     esi, edx
mov     edi, eax
call    rcs
mov     [rbp+var_C], eax
cmp     [rbp+var_C], 6954A9Bh
jnz     short loc_400735
```

```
mov     edi, offset aYouWin ; "You win!"
call    _puts
mov     edi, offset aFlag ; "<flag>"
mov     eax, 0
call    _printf
jmp     short loc_40073F
```

```
loc_400735:
mov     edi, offset aWrongAnswer ; "Wrong Answer"
call    _puts
```

```
loc_40073F:
mov     eax, 0
```

```
loc_400744:
mov     rcx, [rbp+var_8]
xor     rcx, fs:28h
jz      short loc_400758 "Main function end"
```

```
loc_400758:
leave
retn
```