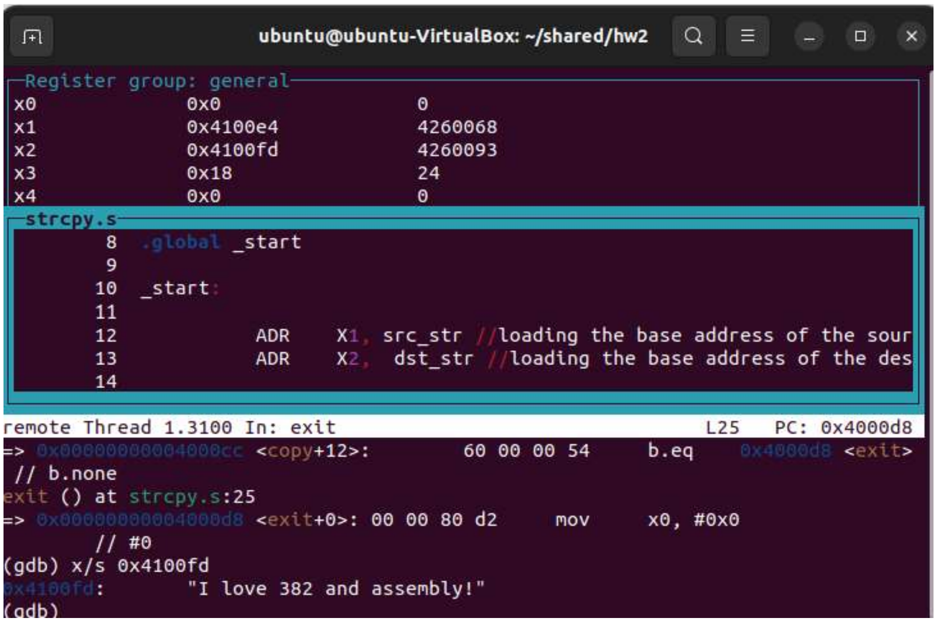
Alisha Patel
I pledge my honor that I have abided by the Stevens Honor System.

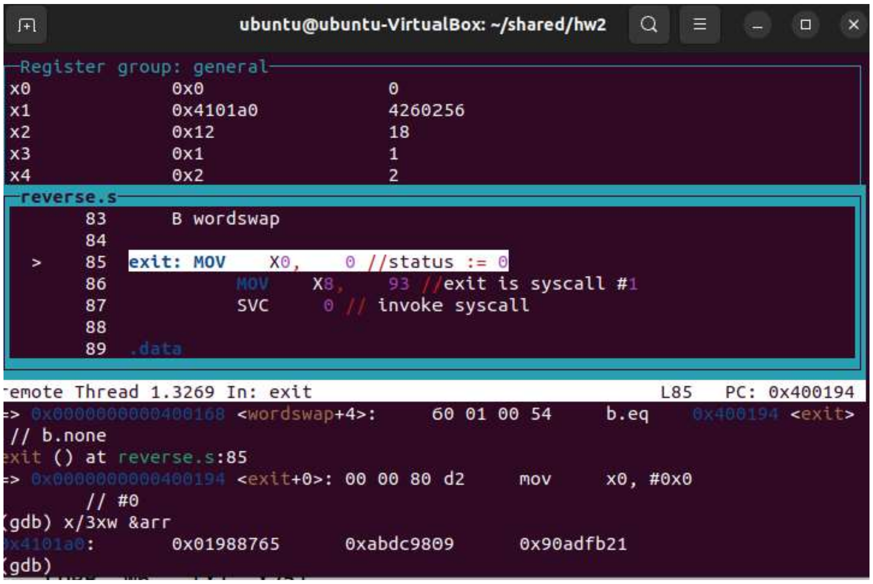
Strcpy Function



```
Register group: general
x0             0x0                 0
x1             0x4100e4            4260068
x2             0x4100fd            4260093
x3             0x18                24
x4             0x0                 0
strcpy.s
          .global _start

          _start:

                ADR    X1, src_str //loading the base address of the sour
                ADR    X2,  dst_str //loading the base address of the des

remote Thread 1.3100 In: exit                                  L25    PC: 0x4000d8
=> 0x00000000004000cc <copy+12>:        60 00 00 54     b.eq    0x4000d8 <exit>
 // b.none
exit () at strcpy.s:25
=> 0x00000000004000d8 <exit+0>: 00 00 80 d2     mov     x0, #0x0
        // #0
(gdb) x/s 0x4100fd
0x4100fd:       "I love 382 and assembly!"
(gdb)
```

It successfully copied the whole string from x1(src_str) to x2 (dst_str). It printed the second register which holds the destination string as it iterates through the first string and as it reaches the null terminator, it exits the loop.

Reverse Nibbles



```
Register group: general
x0             0x0                 0
x1             0x4101a0            4260256
x2             0x12                18
x3             0x1                 1
x4             0x2                 2
reverse.s
              B wordswap

   >      exit: MOV    X0,     0 //status := 0
                    MOV    X8,     93 //exit is syscall #1
                    SVC      0 // invoke syscall

          .data
remote Thread 1.3269 In: exit                             L85    PC: 0x400194
=> 0x0000000000400168 <wordswap+4>:     60 01 00 54     b.eq    0x400194 <exit>
 // b.none
exit () at reverse.s:85
=> 0x0000000000400194 <exit+0>: 00 00 80 d2     mov     x0, #0x0
        // #0
(gdb) x/3xw &arr
0x4101a0:       0x01988765      0xabdc9809      0x90adfb21
(gdb)
```

The reversing nibbles is functional because it reverses the array and the nibbles and then resets them in the array. It will swap the nibbles and then changes them in the array.