

# CS 264 Memory Lab

## Spring 2022

Below I have pasted a short assembly language program, including source code and a memory image.

What is the address of the *H* in the ASCII string?

Write a program in assembly language that replaces all of the bytes in the string with the value `0xFF`.

```
ORG    $400
START:
    LEA MSG,A1
    MOVE.L #14,DO
    TRAP #15

MSG:
    dc.b 'HELLO',0
    END    START
```

```
00000400  22 7c 00 00 04 0e 70 0e 4e 4f ff ff ff ff 48 45  |"...p.NO...HE|
00000410  4c 4c 4f 2c 20 57 4f 52 4c 44 21 00 00 00 00 00  |LLO, WORLD!....|
```