Lecture 8 - MARIE instructions

First - One Hot Example

Code From Homework 2

This uses the extended instruction set specified on p257 (verison 5) of the book.

Similar C Code:

```
function PrintString () {
        static char hw[] = { 'H','I','P','Q','R','S','T','U', '\0' };
        static char *X = &hw;
        while ( *X ) {
                Output ( *X );
                X++;
        }
}
```

MARIE Code

```
L1,     LoadI    X
        Output
        Load     X
        Add      _1
        Store    X
        LoadI    X
        SkipGt0              / OnLine use Skipins 0x400 — same instruction just different
        Jump L1
        Halt
        ORG  20
X,      DEC  22               / Counter of how many characters to output.
_1,     DEC  1
hw,     HEX  48              / 'H' Your values (clue: 48 is not correct for homework-02!)
        HEX 49               / 'I'
        HEX 50               / 'P'
        HEX 51
        HEX 52
        HEX 53
        HEX 54
        HEX 55
        HEX 56
        HEX 0
```