

## We're Done: Stop the LC-3!

### ZEROBIT

```
LDI R4,DSR
BRzp ZEROBIT
STI R2,DDR
ADD R0,R0,R0
ADD R1,R1,#-1
BRzp BITLOOP
HALT
```

Stop the  
processor!

Is there an LC-3  
instruction for that?

The code is on the web page for you to try.

## Reference Copy of Code (with Bits in R0)

```
.ORIG x3000
; fill R0 with something
AND R1,R1,#0
ADD R1,R1,#15
LD R3,ZERO
BITLOOP ; main loop
ADD R2,R3,#0
ADD R0,R0,#0
BRzp ZEROBIT
ADD R2,R2,#1
```

### ZEROBIT

```
LDI R4,DSR
BRzp ZEROBIT
STI R2,DDR
ADD R0,R0,R0
ADD R1,R1,#-1
BRzp BITLOOP
HALT
ZERO .FILL x30
DSR .FILL xFE04
DDR .FILL xFE06
.END
```