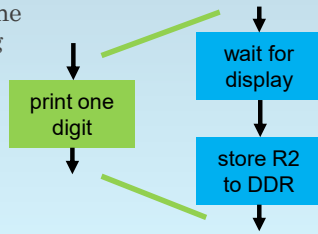


Printing an ASCII Character Takes Two Steps

Printing the bit also takes two steps

First, we wait for the display by checking DSR.

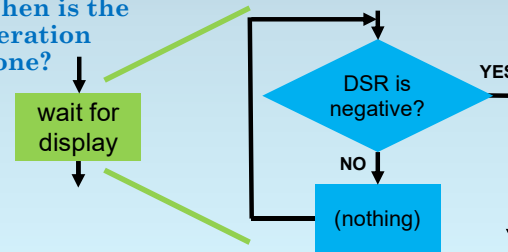
Then we write the character to the DDR.



Waiting for the Display Requires an Iteration

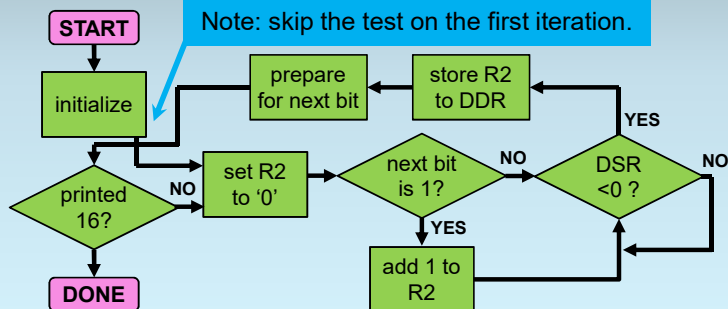
Waiting for the display is an iteration.

When is the iteration done?



A Flow Chart for Printing in Binary

Note: skip the test on the first iteration.



Only Two Registers Need Initialization

Let's write the code!

What needs to be initialized?

- ~~R0~~ next bit to print (shift R0 left)
 - R1 next bit index to print (15 down to 0)
 - ~~R2~~ next ASCII character to print
 - R3 ASCII '0' (x30) for convenience
 - ~~R4~~ a temporary
- R0 is given
- R2 is calculated later
- R4 is temporary