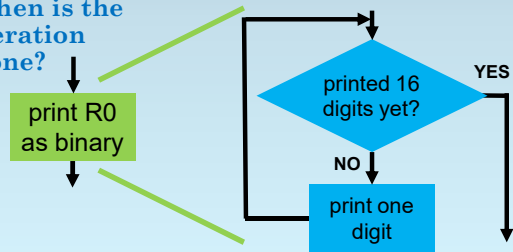


Second Step: Print by Iterating Over Digits

Next, break down printing into an iteration.

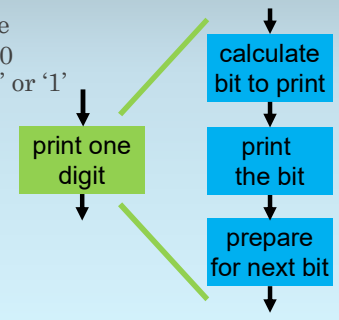
When is the iteration done?



Third Step: Printing a Digit Requires Three Steps

To print a digit, we

- check bit 15 of R0 and get ASCII '0' or '1' into R2
- send R2 to the display
- shift R0 left and count down R1

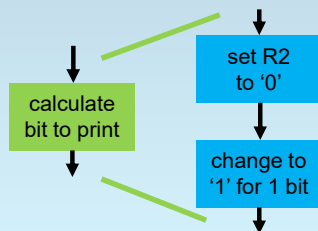


Getting the ASCII Character Takes Two Steps

Getting the ASCII character can be done in two steps

First, we set R2 to ASCII '0'.

Then we change R2 to '1' (add 1) iff the next bit is a 1 bit.



Change R2 from '0' to '1' Conditionally

Bit 15 of R0 holds the next bit to print.

