Milestone 2: Lab Guide Answers

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## How does the macro UART\_DATA\_BINARY impact the UART?

The macro *UART\_DATA\_BINARY* impacts the UART by specifying, in a way, how the data received from the user — in this case, one byte at a time — is translated to and from the board.

## How does the macro UART\_RETURN\_FULL impact the UART?

The macro *UART\_RETURN\_FULL* impacts the UART by returning the data to the user for affirmation in its full capacity, so typing “O” and then “N”, though separately, would return “ON”.

## What driver call would you use to write 10 characters out of the UART?

To write 10 characters out of the UART, the driver UART\_WRITE(uart, &input, 10) would be used. The *uart* is the UART utilized in this example; *&input* references the input stream from the user; and *10* signifies how many bytes shall be returned.

## What is the driver call to turn off LED 0?

The driver call to turn off LED 0 — the red LED on the board — is *GPIO\_WRITE(CONFIG\_GPIO\_LED\_0, CONFIG\_GPIO\_LED\_OFF)*.

## What is the UART baud rate?

The UART baud rate present in this milestone is 115200. The baud rate is the rate at which communication is transferred along a communication channel per second. In serial terms, utilized in this milestone, 115,200 bits of information are transferred within one second.