



Lecture Review:

- Figure out what the 2's complement value is:

1	0	0	1
-2^3	2^2	2^1	2^0

$$(1 \cdot -2^3) + (0 \cdot 2^2) + (0 \cdot 2^1) + (1 \cdot 2^0) = -8 + 0 + 0 + 1 = -7$$

- How many bytes can represent UTF-8 characters?
1 to 4 bytes (UTF-8 is a variable-length encoding where ASCII characters use 1 byte, while other characters use 2, 3, or 4 bytes).
- What is one way to printf() the bits stored in memory?
Could be:
 - Hexadecimal format (%x or %02x): Print the variable in hex (e.g., printf("0x%x\n", val);), where each hex digit directly maps to a group of 4 bits (a nibble).
 - Binary format specifier (%b in C23): Modern C23 supports %b directly to print binary representations (e.g., printf("%b\n", val);).