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# How Computer Store Negative Numbers:

Computers store negative numbers using a system called Two's Complement, which is the most widely used method in modern computing.

**🔹 How Two's Complement Works**

Two’s complement allows computers to represent both positive and negative numbers using binary digits (bits) without needing a separate sign bit.

1. Positive numbers are stored in normal binary form.
2. Negative numbers are stored by:
   * Taking the binary representation of the positive number.
   * Flipping all bits (One’s Complement).
   * Adding 1 to the result.

This ensures that addition and subtraction work the same way for both positive and negative numbers.

Note: Two’s compliment of a negative number is it’s positive number

* Take the two's complement of (−7) to convert it back to its positive form (7).

# Operators:

* AND (&): simple bitwise and operation
* OR (|): simple bitwise or operation
* XOR (^): simple xor operation
* Left Shift (<<): simple left shift operation
* Right Shift (>>) simple right shift operation