**191. Number of 1 Bits**

Easy

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Write a function that takes an unsigned integer and returns the number of '1' bits it has (also known as the [Hamming weight](http://en.wikipedia.org/wiki/Hamming_weight)).

**Note:**

* Note that in some languages, such as Java, there is no unsigned integer type. In this case, the input will be given as a signed integer type. It should not affect your implementation, as the integer's internal binary representation is the same, whether it is signed or unsigned.
* In Java, the compiler represents the signed integers using [2's complement notation](https://en.wikipedia.org/wiki/Two%27s_complement). Therefore, in **Example 3**, the input represents the signed integer. -3.

**Example 1:**

**Input:** n = 00000000000000000000000000001011

**Output:** 3

**Explanation:** The input binary string **00000000000000000000000000001011** has a total of three '1' bits.

**Example 2:**

**Input:** n = 00000000000000000000000010000000

**Output:** 1

**Explanation:** The input binary string **00000000000000000000000010000000** has a total of one '1' bit.

**Example 3:**

**Input:** n = 11111111111111111111111111111101

**Output:** 31

**Explanation:** The input binary string **11111111111111111111111111111101** has a total of thirty one '1' bits.

**Constraints:**

* The input must be a **binary string** of length 32.