

## 191. Number of 1 Bits

Write a function that takes the binary representation of a positive integer and returns the number of 1 bits it has (also known as the Hamming weight).

I have already transformed decimal to binary many times over, often with the use of a string and constant division by two. I could do that again, with just iterating over the string to count all the instances it has of one.

Constraints: •  $1 \leq n \leq 2^{31} - 1$

Now I recall that it wasn't a simple division,

$n = 11 \rightarrow 5 \rightarrow 2 \rightarrow 1 \rightarrow 0$

but I needed the use of the modulo operator to get the remainder

str = 1110

$n = 11 \rightarrow 6 \rightarrow 3 \rightarrow 1$

str = 1011

I just need two loops: one for transforming the decimal to a binary string and other to count

the amount of ones.