

* Majority Element

3 1 2 2 4 5 6 2 2 2 2

If same increase count. Else decrease count. When count = 0, set the current val. However, majority is $\geq \frac{n}{2} + 1$, count > 0 for the majority.

• Can use Bit Masking as well.

2 → 10

1 → 01

3 → 11

2 → 10

2 → 10

check majority in each

10 → answer.

Integers from $-2^{31} \leq n \leq 2^{31} - 1$ takes 32 bits
∴ check for 32 places → 1 to 1 < 32