75 Days of Code
Day 69
Problem no : Leetcode 1318
Problem Title : Minimum Flips to Make a OR b Equal to c
Problem type : Bit manipulation

Given 3 positives numbers a, b and c. Return the minimum flips required in some bits of a and b to make (a OR b == c). (bitwise OR operation).
Flip operation consists of change any single bit 1 to 0 or change the bit 0 to 1 in their binary representation.

Example 1:

Input: a = 2, b = 6, c = 5
Output: 3
Explanation: After flips a = 1 , b = 4 , c = 5 such that (a OR b == c)
Example 2:

Input: a = 4, b = 2, c = 7
Output: 1
Example 3:

Input: a = 1, b = 2, c = 3
Output: 0

```typescript
function minFlips(a: number, b: number, c: number): number {
  const limit = Math.max(a, b, c);

  let check = 1;
  let result = 0;
  while (check <= limit) {
    if (check & c) {
      if (!(check & a) && !(check & b)) {
        result++;
      }
    } else {
      if (check & a) {
        result++;
      }
      if (check & b) {
        result++;
      }
    }
    check *= 2;
  }
  return result;
}
```

Accepted

Runtime	Details	Memory
55 ms		42.56 MB
Beats 48.89% of users with TypeScript		Beats 75.56% of users with TypeScript