

Bit Requisites for Tries

q → 1001

31 30
0000, ... 1001
32 bits / 64 bits
↓
can integer if a long long

XOR
Even no. of 1's → 0
odd no. of 1's → 1

→ check if a bit is set or not

3rd bit → 1
PP

q → 0000 --- 1001

31
0000 --- 0001
(num > 3)
→ >> 3

Now
(num >> 3) & 1 → 1 (set)
↓
0 (Unset)

∴ ((num >> i) & 1 != 0) → set
== 0 → unset

→ How do you ~~turn~~ turn on a particular bit?

q → 000 --- 1001
3 2 1 0 3 → index

Turn on 2nd index
C1 < 2)
000 --- 0001
1
C1 < 2)

num | (C1 < 2)

for turning on ith bit → num | (C1 < i)