Meet in the middle

Friday, 26 March 2021 16:38

0 0 0 0 0

− 1

0 0 0 0 1

1 1 1 1 0 +1

1 1 1 1 = −1

$1 << n = 2^n$

$x >> n = \frac{x}{2^n}$

0 0 0 1 0 0

5 4 3 2 1 0

&	0	1
0	0	0
1	0	1

|	0	1
0	0	1
1	1	1

^	0	1
0	0	1
1	1	0

~

0 1

1 0

x & (1 << 3) != 0

x |= (1 << 3)

x ^= (1 << 3)

1 0 1 0 0 1

& 0 0 0 1 0 0 0

0 0 0 1 0 0 0

& (1 0 0 1 0 0 1

0 0 0 1 0 0 0

x := (1 << 3)

x & = ~(1 << 3)

& (0 0 0 1 0 0 0
1 1 1 0 1 1 1
---
1 0 0 0 0 0 1

```
int set = 0
for (; set < (1 << n); set++)
    for (int i = 0; i < n; i++)
        if (set & (1 << i))
            sum += tab[i];
            ct++;
    if (sum == reszta)
        ans = true
        res = min(res, ct);
go(int pos, bool f)
    czy_brac[pos] = f;
    if (pos == n)
        check();
    else
        go(pos+1, 0);
        go(pos+1, 1);
```