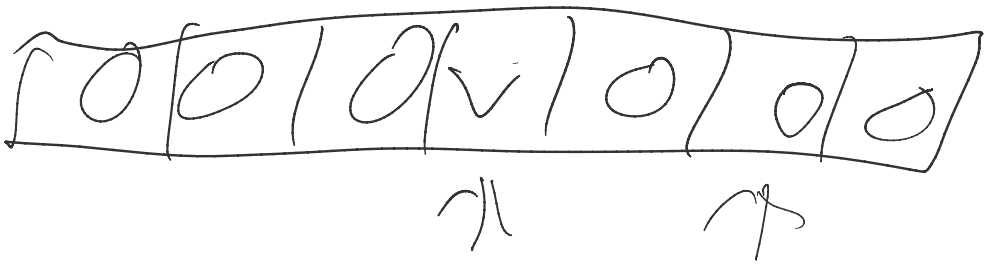
Drzewa przedzialowe 06.11

Friday, 6 November, 2020 16:51

U : x v

Q : x



U : x v

Q : a b

U → Q

a + b + c

U ! a b v

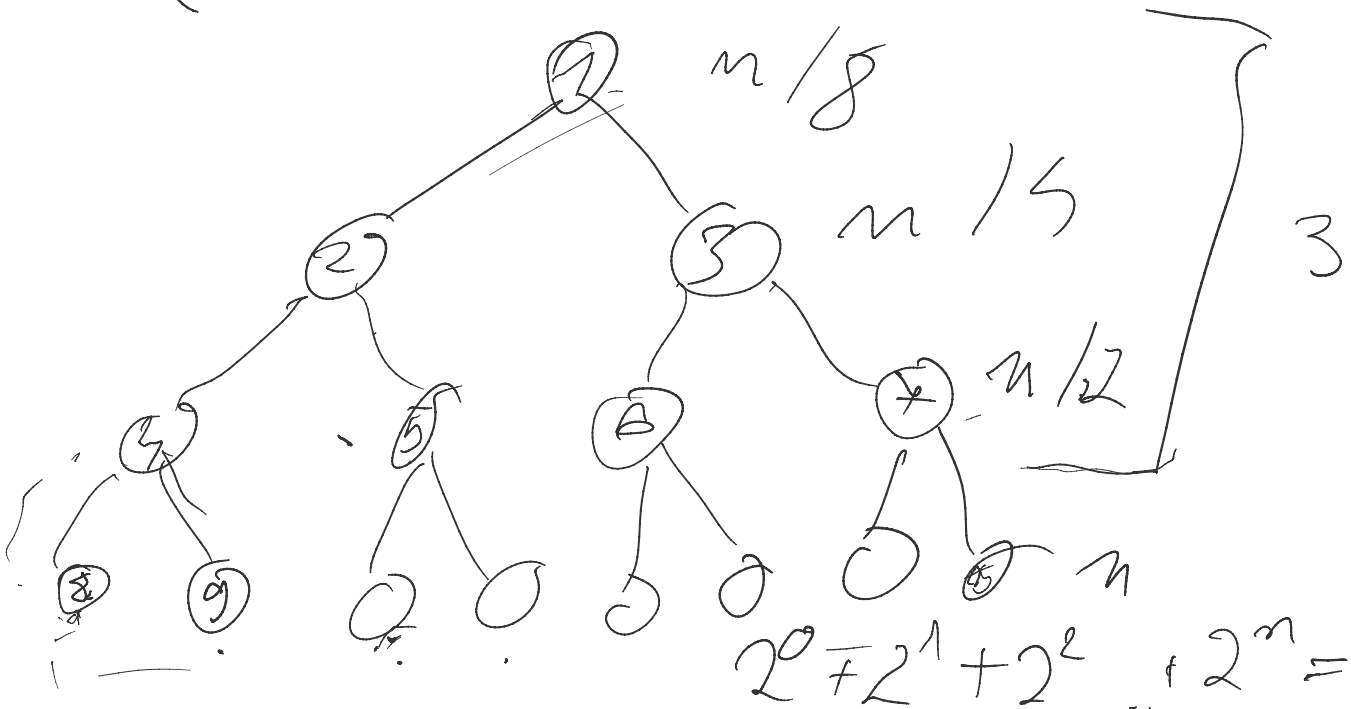
Q : x

U → Q

8	5	2	-3	-7	-5
8	13	15	12	5	0

U : x V

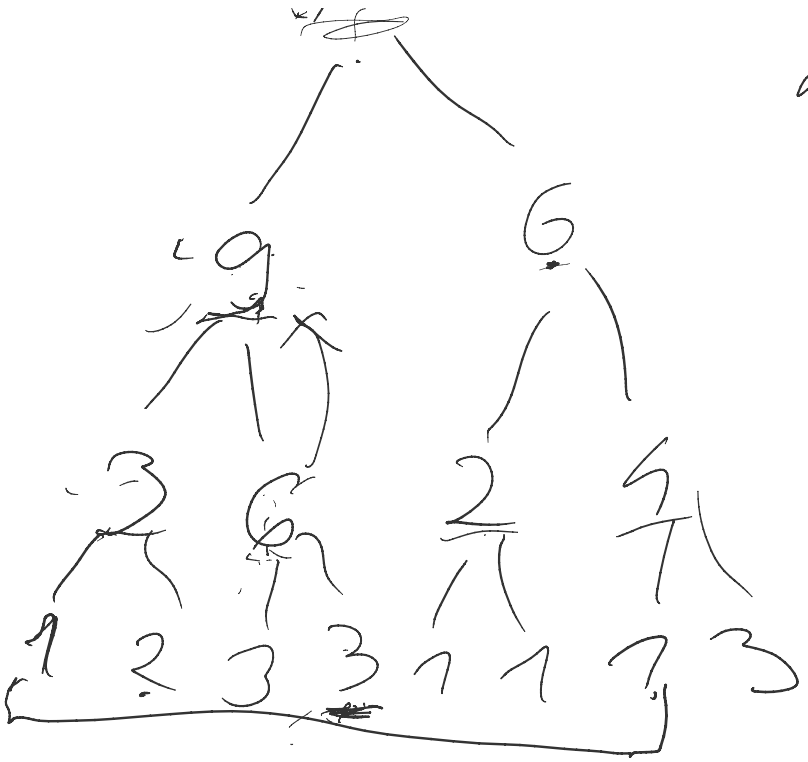
Q : a b



$2^0 + 2^1 + 2^2 \dots + 2^n = 2^{n+1} - 1$

15

a/2 = /2 /2



$a/2 = b/2$

KON

8

$5+6=11$

$10+2=12$

$1+1=2$

$2+2=4$

$1 << 20$

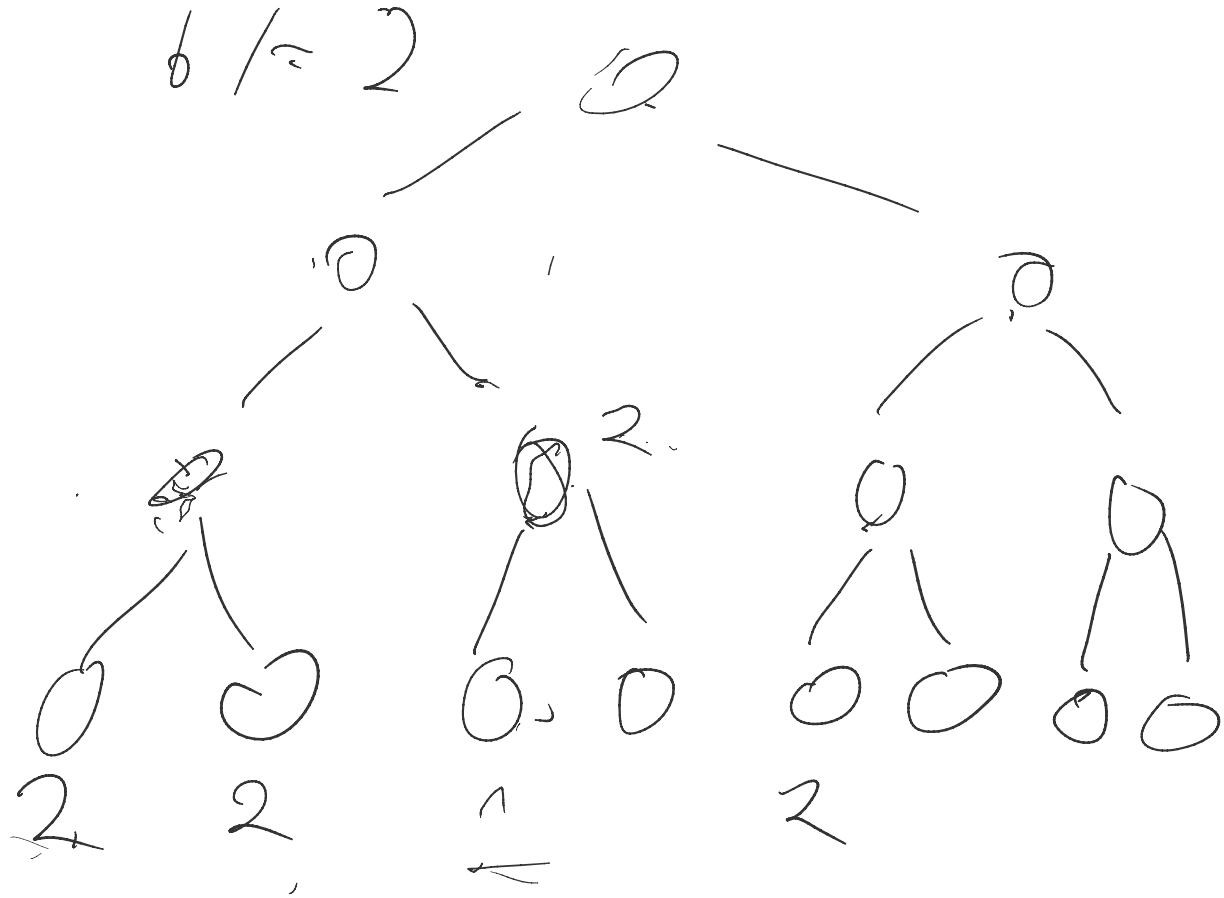
int t[2 · 1<<20]

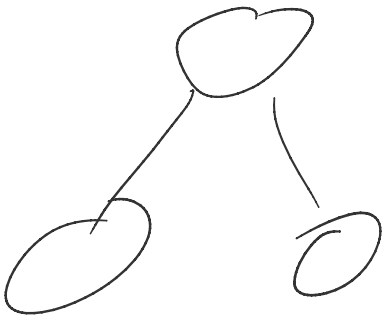
a[+]+ = v

```
x += 1<<20;
(t[x] += v;
 x /= 2;
```

Q:

```
a += 1<<20;
b += 1<<20;
int res = a;
if(a != b)
    res += b;
while(a/2 != b/2)
    if(a%2==0)
        res += t[a+1]
    if(b%2==1)
        res += t[b-1]
    a /= 2
```



U: a b ∨

Q: a b