K7 - Contest

Friday, 5 November 2021 17:52

NWD

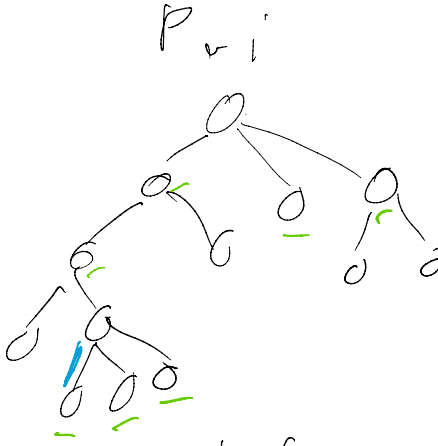
$NWD(a, NWD(b, c)) = NWD(NWD(a, b), c)$

```
U(x, v):
    x += N
    t[x] = v

Q(a, b):
    a += N
    b += N
    int res = mod(t[a], t[b]);
    while(a/2 != b/2)
        if(a%2 == 0) res = mod(res, t[a+1]);
        if(b%2 == 1) res = mod(res, t[b-1]);
        a /= 2, b /= 2;
    ret res;

mod(a, b):
    if(b == 0) ret a;
    ret mod(b, a%b);

while(x != 1)
    x /= 2;
    t[x] = mod(t[2x], t[2x+1]);
```

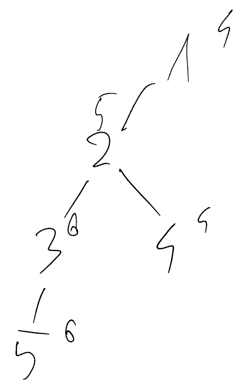


dp[v][0] = suma dzieci u dp[u][1]

dp[v][1] = suma dzieci u min(dp[u][0], dp[u][1]) + t[v];

min(dp[1][0], dp[1][1])

min(dp[1][0], dp[1][1])



2kp

f(1 3 3 4) = 1

1, 2, ~~3~~, 4, 9

1, 1, 2, 3, 4, 6, 9

```
sort()
for (i = 0, i < n)
    if (t[i] == m+1)
        mx = t[i];
        ~~res.pB(t[i])~~; k--;
    else (t[i] < m+1)
        st.p(t[i])
    else
        k>0
```

```
else
  while (k>0 !st.empty() && t[i][j] > m+1)
    ~~res.push_back(st.top());~~
    st.pop();
    k--;
    m += st.top();
  if t[i][j] > m+1
    k = 0
    break;
while k --> 0 && !st.empty()
    m = st.top();
    st.pop();
cout << m;
```