

```
int dfs(int s) {
    visit[s] = true;
```

```

    visit[s] = true;
    for (x : g[s])
        if (!visit[x])
            w += dfs(x);
    return w + 1;
int dfs(int s, int p)
    for (x : g[s])
        if (x != p)
            w += dfs(x, s)
    parent[s] = p;

```

dfs(1, -1)

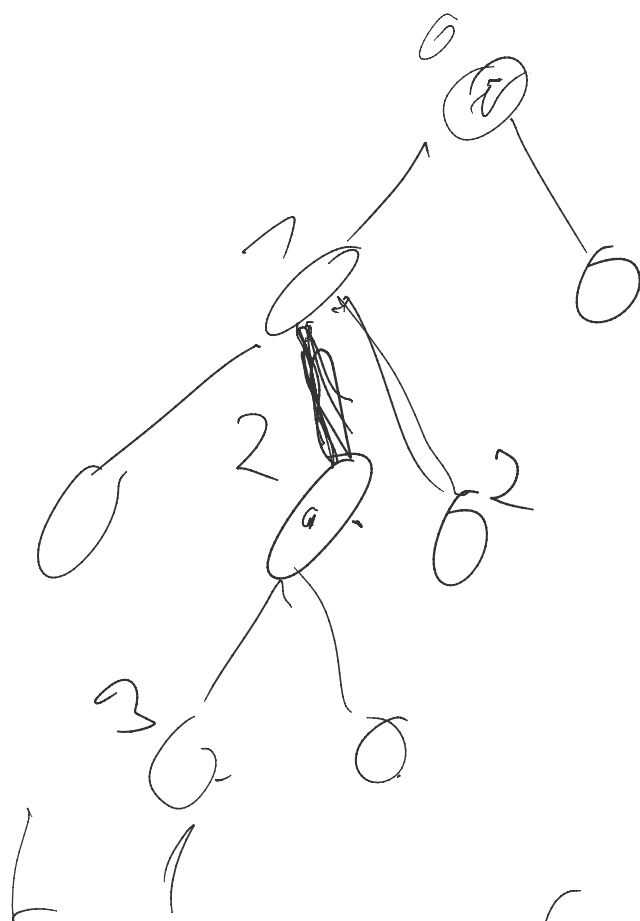
dfs(s, p)
++w;

```

for (x: g[S])
  if (x != p)
    dfs(x, S)

```

-- w;



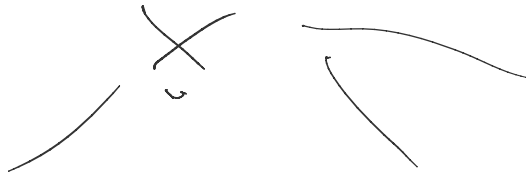
$dfs(x) \rightarrow a$

$dfs(a) \rightarrow \underline{b}$

$a \rightarrow b \sim \dots$

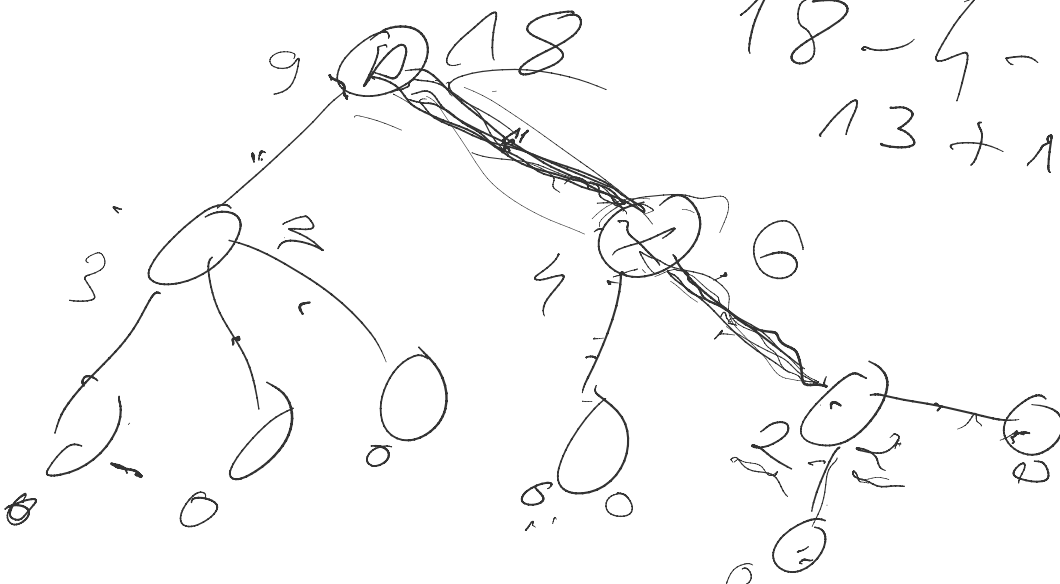
$a \rightarrow b \sim \text{Srednica}$

$\exists c \rightarrow b' \rightarrow a \rightarrow b$



$$18 - 4 - 1 = 13$$

$$13 + 10 - 5 = 18$$



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

$$\text{wgn}[x] = \text{wgn}[p] - \text{siz}[x] - 1$$

$$\text{wgn}[x] += M - (\text{siz}[x] + 1)$$

$$\text{for } (i=0; i < n; i++)$$

$$v += \text{wgn}[i] * \text{wgn}[i];$$

$$v \% = MOD;$$

$$v *= v;$$

$$\text{cout} << v \% MOD;$$

