$24 = 2^3 \times 3$

$\sigma(24) = (2^0 + 2^1 + 2^2 + 2^3) \times (3^0 + 3^1)$

$= 15 \times 4 = 60$

$n = p_1^{a_1} \times p_2^{a_2} \cdots \times p_m^{a_m}$

p_i 为质数.

$\sigma(n) = (p_1^0 + p_1^1 + \cdots + p_1^{a_1}) \times (p_2^0 \cdots) \times \cdots$

$\sigma(n)$ 奇数 $\longrightarrow \begin{cases} p_1^0 + p_1^1 + \cdots p_1^{a_1} \\ p_2 \\ \vdots \\ p_m \end{cases}$ 均为奇数. ……

$p_i = \begin{cases} 2. & 2^0 + 2^1 + 2 \cdots \text{ 一定是奇数.} \\ \text{others.} & p^0 + p^1 + \cdots + p^a \text{ is } \begin{array}{l} \text{奇} \Rightarrow \text{当 } a \text{ 为偶} \\ \text{偶} \Rightarrow \text{当 } a \text{ 为奇.} \end{array} \end{cases}$

p^x 一定是奇数

$\therefore \sigma(n) = (p_1^0 + p_1^1 + \cdots p_1^{a_1}) \times (p_2^0 + p_2^1 + \cdots + p_2^{a_2}) \times \cdots$

① $p_1 \neq 2$　q_i 均为偶数　设 $q_i = 2k_i$

$$\Rightarrow n = p_1^{q_1} p_2^{q_2} \cdots p_m^{q_m}$$

$$= \left(p_1^{k_1} p_2^{k_2} \cdots p_m^{k_m}\right)^2 = T^2$$

n 为平方数.

② $p_1 = 2$　$n = 2^{q_1} \cdot \left(p_2^{k_2} p_3^{k_3} \cdots p_m^{k_m}\right)^2$

当 $q_1 = 1$　$n = 2T^2$

$q_1 > 1$ 且 $q_1 = 2q'$　$n = \left(2^{q'}T\right)^2 = T'^2$

$q_1 > 1$ 且 $q_1 = 2q'+1$　$n = 2\left(2^{q'}T\right)^2 = 2T'^2$

综上　当 $n = \underbrace{T^2 \text{ 或 } 2T^2}$ 时. $G(n)$ 为奇数.

$$\text{count}\,(n = T^2) = \left\lfloor \sqrt{n} \right\rfloor$$

$$\text{count}\,(n = 2T^2) = \left\lfloor \sqrt{\left\lfloor \frac{n}{2} \right\rfloor} \right\rfloor$$

$$\text{ans} = n - \left\lfloor \sqrt{n} \right\rfloor - \left\lfloor \sqrt{\left\lfloor \frac{n}{2} \right\rfloor} \right\rfloor$$