1100金币-数学法

第1天到K天每天拿到金币示意图

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 1 |  |  |  |  |  |
| 2 | 2 | 2 |  |  |  |  |
| 3 | 3 | 3 | 3 |  |  |  |
| 4 | 4 | 4 | 4 | 4 |  |  |
| … | … | … | … | … | … |  |
| N | N | N | N | N | N | N |

图1

第1天到K所经历的天数示意图

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 1 |  |  |  |  |  |
| 2 | 2 | 3 |  |  |  |  |
| 3 | 4 | 5 | 6 |  |  |  |
| 4 | 7 | 8 | 9 | 10 |  |  |
| … | … | … | … | … | … |  |
| N | N | N | N | N | N | N |

图2

优化一下(转换一下)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 1 |  |  |  |  |  |
| 2 | 1+1 | 1+2 |  |  |  |  |
| 3 | 3+1 | 3+2 | 3+3 |  |  |  |
| 4 | 6+1 | 8 | 9 | 10 |  |  |
| … | … | … | … | … | … |  |
| N | Sn-1+1 | Sn-1+2 | … | … | … | Sn-1+N |

图3

第k天大约在

Sn-1KSn

Sn-1==

Sn =

由得：

K

由得

N-1/2N+1/2

由N =

由反推保证成立的情况得到正确的N值。

由N结合图3推出答案。

12+22+32+…N2=

https://baike.baidu.com/item/平方和公式/3264126?fr=aladdin

答案=+N(k-SN-1)