

## Gold Coins

### Problem Description

The king gives gold coins as wages to loyal knights. On the first day, the knight receives a gold coin; For the next two days (the second day and the third day), he receives two gold coins each day. For the next three days (the fourth, fifth, and sixth day), he receives three gold coins each day. For the next four days (seventh, eighth, ninth, and tenth day), he receives four gold coins each day...; This pattern continues: after receiving  $N$  gold pieces per day for  $N$  consecutive days, the knight receives  $N+1$  gold pieces per day for  $N+1$  consecutive days. Calculate how much gold the knight has earned in the first  $K$  days.

### Input

There is an integer  $K$ , representing the number of days in which the knight receives gold coins.

### Output

There should be an integer, representing the number of gold coins the knight receives.

### Sample Input

6

### Sample Output

14

### Hint

### Sample Input 2

1000

### Sample Output 2

29820