

## 9

**Civilization group**

5 points

**Introduction**

An ancient civilization built an infinite odd numbers pyramid, with the purpose of knowing the civilization-group of each member. They wrote it down on to a stone.

The shaman was the first and his civilization-group was the 1, his family was the third and the fifth and they belonged to the civilization-group 8. This way, they could classify people in civilization-groups. The civilization-group is the sum of all the numbers that are in a row, so for 1 is 1, for 3 & 5 is 8, for 7 & 9 & 11 is 27, and so on...

```
1:          1                --> civilization-group: 1
2:         3   5            --> civilization-group: 8
3:        7   9   11        --> civilization-group: 27
4:       13  15  17   19    --> civilization-group: 64
...

```

**HINT:** do not try to hardcode all the possible solutions

**Input**

The input to the problem will be a number that indicates the row number.

**Output**

Should be the sum of all the odd numbers of the row indicated in the input.

**Example 1****Input**

2

**Output**

8

**Example 2****Input**

12

**Output**

1728