Problem A: 3-6-9 Game

Description

The game of 3-6-9 is a simple game that can be played among a number of friends.

To play the game, everyone is placed in an order. Then the game starts with one person and it follows the order. When the last person is reached, the first person continues where the last person has left off.

The game has just four rules:

- 1. The first person starts off by called the number 1.
- 2. Each person calls the number that is 1 higher than the previous person.
- 3. When the number to call has the digits 3, 6 or 9 in it, then the caller must clap for the number of 3, 6, 9 digits, instead of calling out the number.

Find the number of claps there would exist in a game of 3-6-9 that goes up to 10^k th turn.

Input

Your program is to read from standard input. The number of turns in the round is given by 10^k . In the first line of input k is given $(1 \le k \le 12)$.

Output

Your program is to write to standard output. On the first line of output, you should print the total number of claps in a round that lasts up to 10^k th turn.

Sample

Input	Output
2	60