

EVEN DIGITS

My cousin study in CSE dept of Rajshahi University. She asked me a simple task. But I am weak in programming. I know CSE dept of Islamic University has many special programmer. So, please help me from this problem by solving this simple problem.

We know even digits are = 0 , 2 , 4 , 6 , 8 .

Now, She asked n'th number which consist only even digit.

For example, first some even digits consist number are 0 , 2 , 4 , 6 , 8 , 20 , 22 , 24 , 26 , 28 , 40 etc.

n = 1 so, answer = 0.

n = 2 so, answer = 2.

n = 3 so, answer = 4.

n = 6 so, answer = 20.

This way

Input :

Input starts with an integer T (≤ 10), denoting the number of test cases.

Each case contains an integer n ($1 \leq n \leq 1000,000,000,000$)

Output :

n'th even digits consist number.

Sample input:

3

4

10

999

Sample output:

Case 1: 6

Case 2: 28

Case 3: 24886

Problem setter: Shohag