Binary representation

Write a program to print Binary representation of a given number.

Input:

The first line of input contains an integer T denoting the number of test cases. The first line of each test case is N.

Output:

Print binary representation of a number in 14 bits.

Constraints:

 $\begin{array}{l} 1 \leq T \leq 100 \\ 1 \leq N \leq 5000 \end{array}$

Example:

Input:

2

2

5

Output:

 $00000000000010\\0000000000101$