# Binary

In this problem, you will be given an integer N. You need to write all the binary numbers of length N.
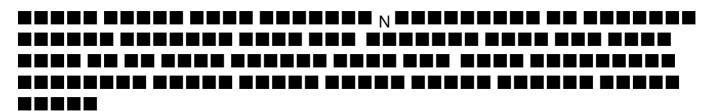
██ █████████ ███████ ████ ████████████ $N$ █████ █████ ███████ $N$ █████████ ██ ███████ ██████ ███████ ████ ███

## Input

The first line of input consists of a number **T,** denoting the number of test cases. There will be next **T** lines. Each line will contain a integer N (0<N≤10).

███████ █████ █████ ████ ██████ , **T,** ████ █████ **T** ███████ ███ █████ ████ █████ ████ ███ ██ ███████ **T** ██████ ██████ ████████████ ████ ███ █████ $N$ (0<N≤10) ████ █████

## Output

For each case print all the binary numbers of length N. Print them in ascending order. See the sample input output for more details.

█████ █████ ████ ██████ $N$ ████████ ██ ███████ ██████ ███████ ████ ███ ███████ ████ ███ ████ ████ ██ ██ ████ ██████ ████ ███ ████ █████████ ███████ █████ █████ █████ █████ ██████ █████ █████

## Example

**Input:**
2
1
3
**Output:**

0
1
100
101
110
111