HOME   PROBLEM   STATUS   CONTEST ⌄   Abreto ⌄   LOGOUT

UESTC 2016 Summer Training #13 Div.2

2:00:57   5:00:00

| Overview | Problem | Status | Rank (42) | Discuss |

| A | B | C | D | E | F | G | H | I |

I - I

Time Limit: 2000MS   **Memory Limit:** 262144KB   **64bit IO Format:** %I64d & %I64u

Submit   Status

Description

standard input/output

Write a program to compute the following sum S given a positive integer n:

$S = \lfloor n/1 \rfloor + \lfloor n/2 \rfloor + ... + \lfloor n/n \rfloor$, where $\lfloor x \rfloor$ is the largest integer not greater than x.

Input

The input file consists of several datasets. The first line of the input file contains the number of datasets which is a positive integer and is not greater than 30. The following lines describe the datasets.

Each dataset contains a positive integer $n(n \leq 10^{12})$ written on a separate line.

Output

For each dataset, write in one line the remainder of the computed sum S divided by 10^6.

Sample Input

Input
2
1
5
Output
1
10