Assignment Case	
COMP6047 Algorithm and Programming	**BINUS** **UNIVERSITY** **Software Laboratory** **Center**
Computer Science	**<Case Code>**
Valid on *Compact Semester Year 2019/2020*	**Revision 00**

Soal
Case

Virus Spread

Jojo works at laboratory and he wants to predict the spread of the viruses. The virus will double itself in every 1 second. Help him to determine the total of the virus after a certain amount of time.

Format Input

The input consists of two integer N and M, denoting number of seconds and modulo respectively.

Format Output

Output the total viruses after N seconds. Output the answer modulo with M.

Constraints

$1 \le N \le 31$

$1 \le M \le 1,000,000,007$

Sample Input	Sample Output
3 10	8

Sample Input	Sample Output
3 5	3