

Help Seller

Ramadan month is the holy month for Muslim Ummah . After Ramadan month, comes biggest festival “EID-UL-FITR”. That’s why most of the people buy new dress to celebrate EID . This year most popular dress in Bangladesh is “Chiriza dress” . So Arif wants to buy a new dress and he chooses “Chiriza dress” as like others . But he will pay the money by cheque.

Price of this dress at first shop is 2 tk. when he goes to the next shop then seller of that shop understands and sets the price **double** from the previous shop and so on .Now Arif stays in nth shop and he decides , buy the “Chiriza dress” from here .He doesn’t want to write last digit of the price of the dress. In the cheque and he tells the seller write down the last digit of the price . Now you are a programmer and find the last digit of the cheque thats seller will write .

Input :

Given a single integer n, that indicates which number of shop Arif stays in now. ($1 \leq n \leq 10^5$) . Program should be terminated by EOF.

Output:

Just print desired result in the problem .

Input	Output
1	2
2	4
3	8
4	6

Database is huge, so use faster I/O to save from TLE

Problem Setter

Mamun Or Rashid.