

CON_LOOP_Level2_003

Write a program to check whether the given number is an adam number or not. Adam number is a number when reversed, the square of the number and the square of the reversed number should be numbers which are reverse of each other. Input : 12 Output : Adam Number Explanation: Square of 12 = 144 Reverse of 12 = 21 Square of 21 = 441 Now Square of 12 and square of reverse of 12 are reverse of each other. Therefore 12 is Adam number.

Input Format

Given a number

Constraints

$1 \leq \text{num} \leq 100000000$

Output Format

print ADAM or NOT ADAM

Sample Input 0

12

Sample Output 0

ADAM