Logo

STUDENT REPORT

DETAILS

Name

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EXPERIMENT

Title

PALINDROME CONVERSION

Description

Write a program to identify whether the given number N is palindrome based upon the following operations:

Add the given number and its reverse.

Check whether the obtained sum after the first operation is a palindrome or not and if not then repeat the above operation.

The given operation will continue until a palindromic number is found. Print the resultant palindromic number as the output.

Note:

Palindrome: A sequence of letters/characters which reads the same backward and forwards. A single letter/character is also considered a palindrome.

Input Format:

The input consists of a single line:

The line contains a single integer denoting N.

The input will be read from the STDIN by the candidate

Output Format:

Print the resultant palindromic number for the given input. The output will be matched to the candidate's output

Sample Input:

28

Sample Output:

121

Explanation:

Reverse of 28 is 82

28+82=110

Reverse of 110 is 011

110+11=121

So 121 is a palindrome.

Source Code:

```
N = int(input())
def is_palindrome(N):
    return str(N) == str(N)[::-1]
def reverse_num(N):
    return int(str(N)[::-1])
def find_palindrome(N):
    while not is_palindrome(N):
        reversed_n = reverse_num(N)
        N =N + reversed_n
    return N
print(find_palindrome(N))
```

RESULT

5 / 5 Test Cases Passed | 100 %