



# STUDENT REPORT

## DETAILS

Name

S MADAN

Roll Number

3BR23CA089

## EXPERIMENT

Title

ENCODE THE NUMBER

Description

You work in the message encoding department of a national security agency. Every message that is sent from or received in your office is encoded. You have an integer  $N$ , and each digit of  $N$  is squared and the squares are concatenated together to encode the original number. Your task is to find and return an integer value representing the encoded value of the number.

input1: An integer value  $N$  representing the number to be encoded.

Output :

Return an integer value representing the encoded value of the number.

Sample Input:

167

Sample Output:

13649

Source Code:

```
def encode_number(N):
    str_N = str(N)
    encoded_str = ""

    for digit in str_N:
        squared_digit = int(digit) ** 2 # Square the digit
        encoded_str += str(squared_digit)

    encoded_value = int(encoded_str)

    return encoded_value

# Input reading
N = int(input())

result = encode_number(N)
print(result)
```

RESULT

5 / 5 Test Cases Passed \ 100 %