STUDENT REPORT

DETAILS

Name

Saleha B

Roll Number

3BR23EE083

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):
    # Convert the number to a string to iterate throug
h its digits
    N_str = str(N)

    # Initialize an empty string to hold the encoded v
alue
    encoded_str = ""

    # Iterate through each digit in the string represe
ntation of N
    for digit in N_str:
        # Square the digit and concatenate the result
        squared_digit = int(digit) ** 2
        encoded_str += str(squared_digit)

    # Convert the concatenated string back to an integ
er
    return int(encoded_str)

# Sample Input
input_value = 167
# Output
print(encode_number(input_value))  # Should return 136
49
```

RESULT

1 / 5 Test Cases Passed | 20 %