



STUDENT REPORT

DETAILS

Name

MADHU.K

Roll Number

3BR23EE057

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 process each digit
    N_str = str(N)

    # Square each digit and concatenate the results
    encoded_str = ''.join(str(int(digit) ** 2) for digit in N_str)

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

# Example usage
if __name__ == "__main__":
    import sys

    N = int(sys.stdin.readline().strip()) # Read the input integer N
    result = encode_number(N)
    print(result)
```

RESULT

5 / 5 Test Cases Passed | 100 %