S.No: 14	Exp. Name: ***Hashing using modulo division***	Date:2025-10-18

Aim:

Write a c program to implement hashing using modulo division.

Input Format:

The first line reads an integer representing the key value.

The second line reads an integer representing the table size.

Output Format:

The output is an integer representing the hash value modulo division.

Source Code:

ModuloDivisionHashing.c

```
#include <stdio.h>

// Function to perform hash using modulo division
int hashModuloDivision( int key, int tableSize ) {
   //complete the function..
   if(tableSize==0)
      return 0;
   return key%tableSize;
}

int main() {
    int key, tableSize;

    // Input the key and table size from the user
    printf("Key: ");
    scanf("%d", &key);

    printf("Table size: ");
    scanf("%d", &tableSize);

    // Perform hashing using modulo division
    int hashValue = hashModuloDivision(key, tableSize);

    // Display the hash value
    printf("Modulo Division: %d\n", hashValue);

    return 0;
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Key: 10
Table size: 6
Modulo Division: 4

Test Case - 2
User Output
Key: 55
Table size: 11
Modulo Division: 0

Test Case - 3
User Output
Key: -15
Table size: 4
Modulo Division: -3