5.Given an array arr[] of size N and an integer K. The task is to find the last remaining element in the array after reducing the array.

The rules for reducing the array are:  
#The first and last element say X and Y are chosen and removed from the array arr[].  
#The values X and Y are added. Z = X + Y.  
#Insert the value of Z % K into the array arr[] at the position ((N/2) + 1)th position, where N denotes the current length of the array.  
Examples:

Input: N = 5, arr[] = {1, 2, 3, 4, 5}, K = 7  
Output: 1  
Explanation:  
The given array arr[] reduces as follows:  
{1, 2, 3, 4, 5} -> {2, 6, 3, 4}  
{2, 6, 3, 4} -> {6, 6, 3}  
{6, 6, 3} -> {2, 6}  
{2, 6} -> {1}  
The last element of A is 1.

#include <iostream>  
using namespace std;  
  
int find\_value(int a[], int n, int k)  
{  
     
    int sum = 0;  
   
     
    for (int i = 0; i < n; i++) {  
        sum += a[i];  
    }  
   
    return sum % k;  
}  
   
  
int main()  
{  
    int n = 5, k = 3;  
    int a[] = { 12, 4, 13, 0, 5 };  
    cout << find\_value(a, n, k);  
    return 0;  
}

**Output:**

