**PROGRAM 1**

/\* 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**.**\*/

#include<stdio.h>

#include<conio.h>

int main()

{

int n, k, arr[10], sum = 0;

printf("Enter the value of n: ");

scanf("%d",&n);

printf("Enter the %d numbers: ", n);

for (int i = 0; i < n; i++) {

scanf("%d", &arr[i]);

}

printf("Enter the value of k: ");

scanf("%d",&k);

for (int i = 0; i < n; i++) {

sum += arr[i];

}

sum = sum % k;

printf("%d", sum);

return 0;

}