**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.**

**package** pblms;

**import** java.util.\*;

**public** **class** Pro2 {

**public** **static** **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;

}

**public** **static** **void** main(String[] args)

{

Scanner s = **new** Scanner(System.***in***);

System.***out***.println("Enter the no. of elemnts:");

**int** n=s.nextInt();

System.***out***.println("Enter the elements into array");

**int** a[] = **new** **int**[100];

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

{

a[i]=s.nextInt();

}

System.***out***.println("Enter the k value:");

**int** k=s.nextInt();

System.***out***.println(*find\_value*(a, n, k));

}

}

**Output:**

