#CODE FOR AGGRESSIVE COWS PROBLEM

package assignment;

import java.util.Arrays;

import java.util.Scanner;

public class aggresivecows {

static Scanner scn = new Scanner(System.in);

public static void main(String[] args) {

int n = scn.nextInt();

int c = scn.nextInt();

int[] arr = new int[n];

int i;

for ( i = 0; i < arr.length; i++) {

arr[i] = scn.nextInt();}

Arrays.sort(arr);

int low=0;

int high=arr[arr.length-1];

int mid=0;

int max=1;

while(low<high)

{

mid=(low+high)/2;

if(func(arr,mid,c))

{

if(max<mid)

max=mid;

low=mid+1;

}

else {high=mid; }

}

System.out.println(max);

}

public static boolean func(int[] arr, int mid, int c) {

int a=arr[0];

int cow=1 ;

for(int i=1;i<arr.length;i++) {

if(arr[i]-a>=mid)

{

cow++;

a=arr[i];

if(cow==c)

return true ;

}}

return false;

}

}