- **EASY**
- **Max Score: 20 Points**

Automorphic Number or Not

Write a Java program check whether a number is an Automorphic number or not.

In mathematics, an automorphic number is a number whose square "ends" in the same digits as the number itself. For example, $5^2 = 25$, $6^2 = 36$, $76^2 = 5776$, and $890625^2 = 793212890625$, so 5, 6, 76 and 890625 are all automorphic numbers.

Input Format

Any integer value.

Output Format

Return whether number is an "Automorphic Number" or "Not an Automorphic Number".

Example 1

Input

10

Output

`Not an Automorphic Number`

Example 2

Input

`76`

Output

`Automorphic Number`

Explanation

65 * 80 = 5200

Constraints

1 < = N < = 10^9

My code

import java.util.*;

```java
import java.lang.*;
import java.io.*;

public class Main
{
    public static void main (String[] args) throws java.lang.Exception
    {
        //your code here

    Scanner s=new Scanner(System.in);
    int n=s.nextInt();
     int k=s.nextInt();
    int arr[]=new int[n];
    for(int i=0;i<n;i++)
       arr[i]=s.nextInt();
    HashMap<Integer,Integer> hm=new HashMap<>();
    int c=0;
      for(int i=0;i<n;i++)
        {
            int r=arr[i]%k;
            int a=hm.getOrDefault(k-r,0);
            c=c+a;
              hm.put(r,hm.getOrDefault(r,0)+1);
        }
        int a=hm.getOrDefault(0,0);
          a=a*(a-1);
          a/=2;
           c=c+a;

          /*  for(int i=1;i<k/2;i++)
                {
                    int a=hm.getOrDefault(i,0);
```

```java
                        int b=hm.getOrDefault(k-i,0);
                        c=c+(a*b);
                }
        if(k%2==0)
        {
                int a=hm.getOrDefault(k/2,0);
            a=a/2;
            c=c+a;
        }
            else
               {
                   int a=hm.getOrDefault(k/2,0);
                    int b=hm.getOrDefault((k/2+1),0);
                    c=c+(a*b);
               }*/

    System.out.print(c);



        }
}
```