

<https://course.acciojob.com/idle?question=4dc94614-e099-4713-a03d-5026978ffab6>

• EASY

• Max Score: 30 Points

MultiplyArrayElements

Given an array, we have to calculate the product of an array.

Input Format

The first line contains an integer 'N' denoting the number of elements. The second line contains 'N' space-separated integers denoting the elements of the array.

Output Format

Print the multiplication of all the elements of array mod 10^9+7 .

Example 1

Input

```
5
1 3 5 5 5
```

Output

```
375
```

Explanation

The multiplication of `arr[1]`, `arr[2]`, `arr[3]`, `arr[4]`, `arr[5]` is 375.

Example 2

Input

```
10
10 10 10 10 10 10 10 10 10 10
```

Output

```
999999937
```

Explanation

The multiplication of all element modulo $1e9+7$ is 999999937.

Constraints

$2 \leq N \leq 3000$

$0 \leq A[i] \leq 5000$

Topic Tags

- [Math](#)
- [Arrays](#)

My code

// in java

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

```
public class Main
{
    static long mod=(long)(Math.pow(10,9)+7);
```

```
static long fun( int arr[], int n)
{
    if(n==0) return 1;
    return ( (arr[n-1])%mod*fun(arr,n-1)%mod)%mod;
}

    public static void main (String[] args) throws java.lang.Exception
    {
        //your code here
        Scanner s=new Scanner(System.in);
        int n=s.nextInt();
        int arr[]=new int [n];
        for(int i=0;i<n;i++)
            arr[i]=s.nextInt();
        long m=fun(arr,n);
        System.out.print(m);

    }
}
```