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Cut the Circle   🔒 locked

H by pruthvishalcodi1

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Given some set of points on a circle, you connect every pair of them with a line, find the maximum number of sections do these lines cut the circle into?

Input Format

First line for each testcase file contains T denoting the no. of test queries followed by T numbers N, denoting the no. of point on a circle.

Constraints

- $1 <= T <= 100000$
- $1 <= N <= 100000$
- **Note:** Use fast I/O methods.

Output Format

For each test query, ouput the result in given format. As the result can be large answer the result modulus 1000000007 ($10^9 + 7$).

Case_No: max_section_circle_cuts_into

Sample Input 0

```
3
1
2
6
```

Sample Output 0

```
Case 1: 1
Case 2: 2
Case 3: 31
```

f 𝕏 in

Submissions: 35
Max Score: 14

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```c
 1 ▼#include <stdio.h>
 2  #include <string.h>
 3  #include <math.h>
 4  #include <stdlib.h>
 5
 6 ▼int main() {
 7
 8 ▼    /* Enter your code here. Read input from STDIN. Print output to STDOUT */
 9      return 0;
10  }
```

Line: 1 Col: 1

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