Begin: 2022-06-30 22:00 BST

UAP Beginner Practice Contest 1

End: 2022-07-06 06:00 BST

Elapsed: 15:04:08

Running

Remaining: 112:55:51

OS

Linux

B - Handshake

Saif is very clever, highly skilled in mathematics, and loves to solve math problems a lot. He arranged a party for all his friends at his place. He invited **N** friends. Now he wants to calculate the total numbers of handshakes by all his **N** friend. If any two friends shake hands exactly once. Can you write a program for saif to count the total number of handshakes?

Input

The first line contains an integer **T**, total number of test cases. Then follow **T** line, each line contains single integer **N**, saif's friends count.

Output

Print single line output for each test case, total number of handshakes.

Constraints

- 1 ≤ **T** ≤ 10^2
- 1 ≤ **N** < 10^6

Sample input

```
2
5
123
```

Sample output

```
10
7503
```

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Server Time: 2022-07-01 13:04:08 BST