


<b>Assignment Case</b>	
COMP6047 Algorithm and Programming	
<b>Computer Science</b>	<b>&lt;Case Code&gt;</b>
<i>Valid on Compact Semester Year 2019/2020</i>	<b>Revision 00</b>

**Soal***Case***Diagonal Matrix**

Jojo and Lili are studying about matrix this semester and Jojo decided to test Lili. Jojo is thinking of testing Lili with adding all the matrix numbers of a square matrix. However, since adding all the numbers in the matrix is too easy for Lili, Jojo decided to make it more advanced by asking her only to add numbers on the diagonal path.

**Format Input**

The input starts with an integer  $T$ , the number of test cases. Each test case will start with an integer  $S$ , the size of the matrix. The next  $S$  line consists of  $S$  integers each, representing the matrix Lili need to solve.

**Format Output**

For each test case, output the sum result of the diagonal path of the matrix. Output the sum result in modulo of 1000003.

**Constraints**

$$1 \leq S \leq 100$$

$$0 \leq S_{i,j} \leq 2000000$$

Sample Input	Sample Output
3 3 1 2 3 6 8 3 4 5 2 4 3 7 3 6 2 3 7 3 6 3 5 7 2 4 8 9 5 1 6 3 7 3 3 8 4 2 6 8 6 9 4 3 6 3 8 9 8 3 6 9 2 1	18 38 39

**Note:**

The each position in the matrix will be added only once, even if they crossed in both diagonal's path.  
Don't forget to add the newline character after printing the output.