

Playing Snakes and Ladders

Jojo and Lili like to play a game called Snakes and Ladders (They believe that you also know the game, right?). But one day, Jojo don't want to play with Lili due to certain reason, so Lili plays alone. As this game should played by at least 2 persons, Lili wants play this game but with some modification on the number of the snakes and the ladders so she can play it alone.

Lili still use the general rule. As usual, the game starts on square number 0 and she will go after rolling the dice. If she stops at the square which connected with a ladder, she will go to the top of the ladder (at certain square) and the ladder is only for going upstairs, not downstairs. If she stops at the square which has snake's head on it, she must go down to the snake's tail (at certain square). Since she has a big house, the size of the board for this game is $10 \text{ columns} \times 3.000 \text{ row}$. That is, the game has 30.000 distinct positions in total.

The location of the ladders are at 9 (to 21), 33 (to 42), and 76 (to 92). Snakes are located at square number 53 (down to 37), 80 (to 59), and 97 (to 88).

After throwing dice N times, where will be the last postion of Lili? Help her.

Format Input

Given one line consists of N - how much she throws the dice, then followed by N lines of k_i - sum of both dice thrown by Lili. It is guaranteed that N is at most 2.000 and k_i between 2 and 12 inclusively.

Format Output

Output the final position of Lili's last position.

Constraints

- $1 \le N \le 2.000$
- $2 \le k_i \le 12$

Sample Input 1 (standard input)

4 10 9 4 6

[©] School of Computer Science - BINUS, 2021. No part of the materials available may be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without prior written consent of School of Computer Science - BINUS. Any other reproduction in any form without the permission of School of Computer Science - BINUS is probibited. Violators of this clause may be academically sanctioned.



Sample Output 1 (standard output)

29

Sample Input 2 (standard input)

5 7 3 2 10 11

Sample Output 2 (standard output)

42

Explanation

On Sample Test Case 2 Lili's position:

- After the 1^{st} roll, her position is on square number 7.
- After the 2^{nd} roll, her position is on square number 10.
- After the 3^{rd} roll, her position is on square number 12.
- After the 4^{th} roll, her position is on square number 22.
- After the 5^{th} roll, her position is on square number 33.
- Because she is in square number 33, she will use the ladder and go to square number 42.

Thus, Lili's final position is on square number 42.

[©] School of Computer Science - BINUS, 2021. No part of the materials available may be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without prior written consent of School of Computer Science - BINUS. Any other reproduction in any form without the permission of School of Computer Science - BINUS is probihited. Violators of this clause may be academically sanctioned.



Playing Snakes and Ladders

Jojo dan Lili senang sekali bermain permainan ular tangga. Namun suatu hari, Jojo sedang tidak ingin bermain sehingga Lili terpaksa harus bermain sendiri. Karena permainan ini membutuhkan setidaknya 2 orang, Lili pun merasa kesepian. Lili akhirnya memutuskan untuk bermain, namun dengan sedikit pengurangan jumlah ular dan tangga.

Semua aturan tetap digunakan oleh Lili. Seperti aturan pada umumnya, permainan dimulai dari petak angka 0 dan akan dilanjutkan sesuai hasil lemparan dadu. Apabila ia berhenti di petak yang terhubung dengan tangga, maka ia dengan senang hati akan naik ke posisi ujung tangga tersebut berada (hanya berlaku untuk naik, tidak untuk turun). Apabila ia berhenti di petak yang terhubung dengan ular, maka ia terpaksa harus turun ke petak tempat ekor ular tersebut berada (hanya untuk turun, tidak untuk naik). Karena rumah Lili begitu besar, ukuran papan ular tangga Lili 10 kolom \times 3.000 baris. Dengan demikian, game ini memiliki total 30.000 posisi yang berbeda.

Lili mengatur posisi tangga dari petak ke 9 ke 21, 33 ke 42, dan 76 ke 92. Untuk posisi ular, ia meletakkannya di petak 53 ke petak 37, 80 ke 59, dan 97 ke 88.

Setelah melakukan *N* kali lemparan dadu, di petak nomor berapa Lili berada? Bantulah dia.

Format Input

Input terdiri dari N yang menunjukkan berapa kali dua buah dadu dilempar oleh Lili, kemudian diikuti oleh N baris k_i (jumlah kedua mata dadu pada lemparan ke i).

Format Output

Output yang dikeluarkan hanya berupa sebuah bilangan bulat yang menunjukkan nomor petak yang ditempati oleh Lili pada akhir lemparan dadu apabila petak start ada di petak ke-0.

Constraints

- $1 \le N \le 2.000$
- $2 \le k_i \le 12$

[©] School of Computer Science - BINUS, 2021. No part of the materials available may be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without prior written consent of School of Computer Science - BINUS. Any other reproduction in any form without the permission of School of Computer Science - BINUS is probibited. Violators of this clause may be academically sanctioned.



Sample Input 1 (standard input)

4 10 9 4 6

Sample Output 1 (standard output)

29

Sample Input 2 (standard input)

5 7 3 2 10 11

Sample Output 2 (standard output)

42

Explanation

Pada Sample Test Case 2 posisi Lili:

- Setelah putaran (lemparan dadu) pertama, di posisi 7.
- Setelah putaran kedua, di posisi 10.
- Setelah putaran ketiga, di posisi 12.
- Setelah putaran keempat, di posisi 22.
- Setelah putaran kelima, di posisi 33.
- Karena posisi ada di petak ke 33, Lili akan naik tangga ke petak 42.

Maka, posisi terakhir dari Lili setelah 5 kali melempar dadu adalah di petak ke-42.

[©] School of Computer Science - BINUS, 2021. No part of the materials available may be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without prior written consent of School of Computer Science - BINUS. Any other reproduction in any form without the permission of School of Computer Science - BINUS is probibited. Violators of this clause may be academically sanctioned.