

[Home](#) » [Compete](#) » [February Challenge 2017](#) » Chef and His Apartment Dues

# Chef and His Apartment Dues

Problem Code: CHEFAPAR

[Tweet](#) [Like](#) [Share](#) Sign Up to see what your friends like.

All submissions for this problem are available.

Read problems statements in [Mandarin Chinese](#), [Russian](#) and [Vietnamese](#) as well.

Chef lives in a big apartment in Chefland. The apartment charges maintenance fees that he is supposed to pay monthly on time. But Chef is a lazy person and sometimes misses the deadlines. The apartment charges 1000 Rs per month as maintenance fees. Also, they also charge a one-time fine of 100 Rs for each of the late payments. It does not matter how late the payment is done, the fine is fixed to be Rs.100.

Chef has been living in the apartment for  $N$  months. Now, he wants to switch the apartment, so he has to pay the entire dues to the apartment. The deadline for the  $N$ -th month is also over. From his bank statement, he finds the information whether he paid apartment rent for a particular month for not. You are given this information by an array  $A$  of size  $N$ , where  $A_i$  (can be either 0 or 1) specifies whether he has paid the 1000Rs in the  $i$ -th month or not. Assume that Chef paid the fees in the  $i$ -th month, then this fees will be considered for the earliest month for which Chef has not yet paid the fees.

For example, assume Chef did not pay any money in first month and 1000Rs in the second month. Then this rent of 1000Rs will be considered for 1st month. But this counts as late payment for the first month's fees, and hence he will have to pay Rs. 100 for that. And since the payment he made in the second month is not accounted for the second month, but rather for the first month, he will incur a fine of Rs.100 even for the second month.

He has not paid any of the fines so far. Can you please help in finding Chef total due (all the fines, plus all the unpaid maintenance fees) that he has to pay to apartment?

## Input

First line of the input contains an integer  $T$  denoting number of test cases. The description of  $T$  test cases follows.

The first line of each test cases contains an integer  $N$  denoting the number of months for which you have to calculate the total amount of money that Chef has to pay at the end of

All Submissions

Successful Submissions



or not. If the corresponding integer is 1, it means that Chef paid the maintenance fees for that month, whereas 0 will mean that Chef did not pay the maintenance fees that month.

---

## Output

For each test case, output a single integer denoting the total amount including fine that Chef has to pay.

---

## Constraints

- $1 \leq T \leq 25$
- $0 \leq A_i \leq 1$

---

## Subtasks

### Subtask #1 (30 points)

- $1 \leq N \leq 10^3$

### Subtask #2 (70 points)

- $1 \leq N \leq 10^5$

---

## Example

### Input

```
4
2
1 1
2
0 0
3
0 1 0
2
0 1
```

### Output

```
0
2200
2300
1200
```

---

## Explanation

**Example case 1.** Chef paid maintenance fees for both the months. So, he does not have any dues left.

**Example case 2.** Chef did not pay the maintenance fees for any of the months. For the first month, he has to pay 1000Rs, and 100Rs fine as a late payment. For second month payments, he just have to pay 1100Rs. So, in total he has a due of  $1100 + 1100 = 2200$  Rs.

**Example case 3.** In the first month, Chef did not pay his maintenance fees. He paid the maintenance of first in the second month. So, he paid a fine of 100Rs for first month. For second and third month, Chef did not pay the maintenance fees. So, he has to pay 1000Rs + 100Rs (of fine) for second month and only 1000Rs + 100Rs (of fine) for third month. In total, Chef has got to pay  $100 + 1100 + 1100 = 2300$  Rs.

**Example case 4.** In the first month, Chef did not pay his maintenance fees. He paid the maintenance of first in the second month. So, he paid a fine of 100Rs for first month. For second month, Chef did not pay the maintenance fees. So, he has to pay 1000Rs + 100Rs (of fine) for second month. In total, Chef has got to pay  $100 + 1100 = 1200$  Rs.

Author: [admin2](#)  
Tester: [6★ mgch](#)  
Tags: [admin2](#)  
Date Added: 1-02-2017  
Time Limit: 2 secs  
Source Limit: 50000 Bytes  
Languages: C, CPP14, JAVA, PYTH, PYTH 3.5, PYPY, CS2, PAS fpc, PAS gpc, RUBY, PHP, GO, NODEJS, HASK, SCALA, D, PERL, FORT, WSPC, ADA, CAML, ICK, BF, ASM, CLPS, PRLG, ICON, SCM qobi, PIKE, ST, NICE, LUA, BASH, NEM, LISP sbcl, LISP clisp, SCM guile, JS, ERL, TCL, PERL6, TEXT, SCM chicken, CLOJ, FS

## Comments ►

[CodeChef is a non-commercial competitive programming community.](#)

[About CodeChef](#) | [About Directi](#) | [CEO's Corner](#) | [C-Programming](#) | [Programming Languages](#) | [Contact Us](#)

© 2009 [Directi Group](#). All Rights Reserved. CodeChef uses SPOJ © by [Sphere Research Labs](#)  
In order to report copyright violations of any kind, send in an email to [copyright@codechef.com](mailto:copyright@codechef.com)

**Directi**  
Intelligent People. Uncommon Ideas.  
The time now is: 10:34:33 AM  
Your IP: 169.54.6.221

### **CodeChef - A Platform for Aspiring Programmers**

CodeChef was created as a platform to help programmers make it big in the world of algorithms, **computer programming** and **programming contests**. At CodeChef we work hard to revive the geek in you by hosting a **programming contest** at the start of the month and another smaller programming challenge in the middle of the month. We also aim to have training sessions and discussions related to **algorithms**, **binary search**, technicalities like **array size** and the likes. Apart from providing a platform for **programming competitions**, CodeChef also has various algorithm tutorials and forum discussions to help those who are new to the world of **computer programming**.

### **Practice Section - A Place to hone your 'Computer Programming Skills'**

Try your hand at one of our many practice problems and submit your solution in a language of your choice. Our **programming contest** judge accepts solutions in over 35+ programming languages. Preparing for coding contests were never this much fun! Receive points, and move up through the CodeChef ranks. Use our practice section to better prepare yourself for the multiple **programming challenges** that take place through-out the month on CodeChef.

### **Compete - Monthly Programming Contests and Cook-offs**

Here is where you can show off your **computer programming skills**. Take part in our 10 day long monthly coding contest and the shorter format Cook-off **coding contest**. Put yourself up for recognition and win great prizes. Our **programming contests** have prizes worth up to INR 20,000 (for Indian Community), \$700 (for Global Community) and lots more CodeChef goodies up for grabs.

#### Programming Tools

[Online IDE](#)

[Upcoming Coding Contests](#)

[Contest Hosting](#)

[Problem Setting](#)

[CodeChef Tutorials](#)

[CodeChef Wiki](#)

#### Practice Problems

[Easy](#)

[Medium](#)

[Hard](#)

[Challenge](#)

[Peer](#)

[School](#)

#### Initiatives

[Go for Gold](#)

[CodeChef for Schools](#)

[Campus Chapters](#)

