Hello 1★ **piyush_rawat09** ▾

Logout (/logou

PRACTICE (HTTPS://WWW.CODECHEF.COM/PRACTICE?ITM_MEDIUM=NAVMENU&ITM_CAMPAIGN=PROBLEMS_HEAD)

COMPETE (HTTPS://WWW.CODECHEF.COM/CONTESTS/?ITM_MEDIUM=NAVMENU&ITM_CAMPAIGN=ALLCONTESTS_HEAD)

LEARN (HTTPS://WWW.CODECHEF.COM/LEARNING?ITM_MEDIUM=NAVMENU&ITM_CAMPAIGN=DISCUSS_HEAD)

DISCUSS (HTTPS://DISCUSS.CODECHEF.COM?ITM_MEDIUM=NAVMENU&ITM_CAMPAIGN=PROBLEMS_HEAD)

ASSOCIATE WITH US (HTTPS://WWW.CODECHEF.COM/CORPORATES)   MORE (HTTPS://WWW.CODECHEF.COM/RATINGS/ALL)

Solve & Learn with Mentors | Rate up on CodeChef | ▌Check our upcoming Learning Camps

Game of Piles Version 1   Problem Code: **GAMEOFPILES1**   ✓

Submit (/JULY221D/submit/GAMEOFPILES1)

Submission Ends In

1	22	11	5
Days	Hrs	Min	Sec

My Solutions   Other's Solutions
(/JULY221D/status/GAMEOF PILES1,piyush_rawat09 (/JULY221D/status/GA

Successful Solutions   **+**

There are N piles where the ith pile consists of A_i stones.

Chef and Chefina are playing a game taking alternate turns with **Chef starting first**.
In his/her turn, a player can choose any non-empty pile and remove **exactly** 1 stone from it.

The game ends when **exactly** 1 pile becomes empty. The player who made the last move wins.
Determine the winner if both players play optimally.

Input Format

- The first line of input will contain a single integer T, denoting the number of test cases.
- Each test case consists of multiple lines of input.
  - The first line of each test case contains a single integer N denoting the number of piles.
  - Next line contains N space-separated integers $A_1, A_2, \ldots, A_N$ - denoting the number of stones in each pile.

Output Format

For each test case, output `CHEF` if Chef wins the game, otherwise output `CHEFINA`.

Note that the output is case-insensitive i.e. `CHEF`, `Chef`, `cHeF`, and `chef` are all considered the same.

Constraints

- $1 \leq T \leq 1000$
- $1 \leq N \leq 10^5$
- $1 \leq A_i \leq 10^9$
- Sum of N over all test cases does not exceed $2 \cdot 10^5$.

Sample Input 1 ⎘

```
3
2
2 2
1
10
3
1 5 6
```

Sample Output 1 ⎘

(/learning?itm_medium=internal-banner&itm_campaign=mentored-learning)

```
CHEFINA
CHEFINA
CHEF
```

Explanation

Test Case 1**:** No matter which stone Chef removes, Chefina will remove the remaining stone from the same pile and make it empty.

Test Case 2**:** Since there is only 1 pile containing 10 stones, the game will last exactly 10 moves with last move made by Chefina.

Test Case 3**:** Chef can remove 1 stone from the first pile and thus make it empty.

Author(s):	utkarsh_adm (/users/utkarsh_adm)
Date Added:	6-07-2022
Time Limit:	1 secs
Source Limit:	50000 Bytes
Languages:	CPP17, PYTH 3.6, JAVA, C, CPP14, PYTH, PYP3, CS2, ADA, PYPY, TEXT, PAS fpc, NODEJS, RUBY, PHP, GO, HASK, TCL, kotlin, PERL, SCALA, LUA, BASH, JS, rust, LISP sbcl, PAS gpc, BF, CLOJ, R, D, CAML, swift, FORT, ASM, FS, WSPC, LISP clisp, SQL, SCM guile, PERL6, ERL, CLPS, PRLG, SQLQ, ICK, NICE, ICON, COB, SCM chicken, PIKE, SCM qobi, ST, NEM

Submit (/JULY221D/submit/GAMEOFPILES1)

Comments ▸

Initiatives

Go for Gold (https://www.codechef.com/goforgold)

CodeChef for Schools (https://www.codechef.com/school)

College Chapters (https://www.codechef.com/college-chapter/about)

CodeChef Goodies (https://goodies.codechef.com)

More

CodeChef For Business (https://business.codechef.com)

Contact Us (https://www.codechef.com/contactus)

Code Of Conduct (https://www.codechef.com/codeofconduct)

User Ranklist (https://www.codechef.com/rankings)

Release Notes (https://codechef.releases.live)

Privacy policy (https://www.codechef.com/privacy-policy)

Terms (https://www.codechef.com/terms)

www.codechef.com (https://www.codechef.com)

Follow Us

(//youtube.com/c/codechefofficial (//facebook.com/codechefofficial (//twitter.com/codechef (//linkedin.com/company/codechef/codechef)
official)