

# Problem L Even Balls

Putra is challenging Ricky to a simple game.

There are N balls each with an integer  $A_i$  written on it. Putra asks Ricky to choose M balls  $(0 \le M \le N)$ , and Ricky's score would be the total sum of all integers on those M balls he chose.

The goal is to get the score as high as possible; however, Putra adds a little bit of twist to the game. "I only accept a total sum which is an even number. Give me an odd total sum then your score will be zero.", said Putra.

Ricky is ready to play the game when he realized that Putra didn't give him the value for M; perhaps, Putra forgot to do that. So, Ricky simply assumes that he can choose as many balls as he likes.

As an observer, you are wondering what is the highest possible score Ricky can get.

For example, let N=7 and the balls values are  $A_{1..7}=\{12,7,3,8,9,12,10\}$ . There are several possible options.

- $\{\} \rightarrow \mathsf{score} = 0$  not choosing anything is also an option
- $\qquad \qquad \{12, 8, 12, 10\} \rightarrow \mathsf{score} = 12 + 8 + 12 + 10 = 42$
- $\qquad \qquad \mathbf{\{}7,3,8,12,10\mathbf{\}} \rightarrow \mathsf{score} = 7 + 3 + 8 + 12 + 10 = 40$
- $\{12, 7, 3, 8, 12, 10\} \rightarrow \text{score} = 12 + 7 + 3 + 8 + 12 + 10 = 52$
- $\qquad \qquad \{12,7,8,9,12,10\} \rightarrow \mathsf{score} = 12 + 7 + 8 + 9 + 12 + 10 = 58$

...

Among all possible options, the highest score of 58 can be obtained by choosing  $\{12,7,8,9,12,10\}$ . Also note that choosing  $\{12,7,3,8,9,12,10\}$  yields a larger total sum (i.e. 12+7+3+8+9+12+10=61) but such a total sum is an odd number and thus the score is 0.

Problem L. Even Balls 1



### Input

Input begins with an integer T ( $1 \le T \le 100$ ) representing the number of cases.

Each case begins with an integer N ( $1 \le N \le 100$ ) representing the number of balls. The next line contains N integers  $A_i$  ( $1 \le A_i \le 10^6$ ) each representing the integer written on each ball.

### Output

For each case, output in a line "Case #X: Y" (without quotes) where X is the case number (starts from 1) and Y is the output for the respective case.

## Sample Input #1

```
4

7

12 7 3 8 9 12 10

1

9999

4

10 20 30 40

5

104 23 104 57 81
```

### Sample Output #1

```
Case #1: 58
Case #2: 0
Case #3: 100
Case #4: 346
```

Explanation for the sample input/output #1

For the  $2^{nd}$  case, the best set is  $\{\}$  with a score of 0.

For the  $3^{rd}$  case, the best set is  $\{10, 20, 30, 40\}$  with a score of 100.

For the  $4^{th}$  case, the best set is  $\{104, 104, 57, 81\}$  with a score of 346.

Problem L. Even Balls 2