Bottles

Program Name: `Bottles.java` **Input File:** `bottles.dat`

Given a sequence of *n* bottles, their volumes are v_0 through v_{n-1}. Drink as much as you can, given that you *cannot drink from any 2 adjacent bottles*. In the example below, you can drink at most 103 ounces by choosing to drink from the highlighted bottles.

index	0	**1**	2	**3**	4	**5**	6	**7**	8	9	**10**	11
v_n	15	**20**	5	**18**	19	**27**	31	**21**	3	0	**17**	16

Input

The input file consists of a single integer *c*, which is the number of test cases, $1 \le c \le 10$. Following that is c lines, where each line is a sequence of integers. The first integer for each test case gives the number of bottles, *n*, where $1 \le n \le 100$. The next *n* integers give the drinkable volume, $0 \le v_n \le 32$, for each corresponding bottle in the line.

Output

The output contains one line for each input test case. Each output line contains a single integer, which is the maximum drinkable volume possible for that input.

Sample Input

```
4
5 2 5 2 5 12
6 1 1 3 3 1 1
6 3 1 3 7 2 4
12 15 20 5 18 19 27 31 21 3 0 17 16
```

Sample Output

```
17
5
14
103
```