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PL-2020-C-Chocolates   🔒 locked

Problem	Submissions	Leaderboard	Discussions

Sam loves chocolates and starts buying them on the 1st day of the year. Each day of the year, x, is numbered from 1 to Y. On days when x is odd, Sam will buy x chocolates; on days when x is even, Sam will not purchase any chocolates.

Complete the code in the editor so that for each day Ni (where $1 \le x \le N \le Y$) in array arr, the number of chocolates Sam purchased (during days 1 through N) is printed on a new line. This is a function-only challenge, so input is handled for you by the locked stub code in the editor.

Input Format

The program takes an array of integers as a parameter.

The locked code in the editor handles reading the following input from stdin, assembling it into an array of integers (arr), and calling calculate(arr).

The first line of input contains an integer, T (the number of test cases). Each line i of the T subsequent lines describes the ith test case as an integer, Ni (the number of days).

Constraints

$1 \le T \le 2 \times 10^5$ $1 \le N \le 2 \times 10^6$ $1 \le x \le N \le Y$

Output Format

For each test case, Ti in arr, your calculate method should print the total number of chocolates Sam purchased by day Ni on a new line.

Sample Input 0

```
10
71
100
86
54
40
9
77
9
13
98
```

Sample Output 0

```
1296
2500
1849
729
400
25
1521
25
49
2401
```

Sample Input 1

```
3
1
2
3
```

Sample Output 1

```
1
1
4
```

Explanation 1

Test Case 0: N = 1 Sam buys 1 chocolate on day 1, giving us a total of 1 chocolate. Thus, we print 1 on a new line.

Test Case 1: N = 2 Sam buys 1 chocolate on day 1 and 0 on day 2. This gives us a total of 1 chocolate. Thus, we print 1 on a new line.

Test Case 2: N = 3 Sam buys 1 chocolate on day 1, 0 on day 2, and 3 on day 3. This gives us a total of 4 chocolates. Thus, we print 4 on a new line.

f   in

Submissions: 979
Max Score: 100
Difficulty: Medium

Rate This Challenge:
☆ ☆ ☆ ☆ ☆

More

```
 1  #include <stdio.h>
 2  #include <string.h>
 3  #include <math.h>
 4  #include <stdlib.h>
 5
 6  int main() {
 7
 8      /* Enter your code here. Read input from STDIN. Print output to STDOUT */
 9      int t;
10      scanf("%d",&t);
11      int arr[t];
12      for(int k=0;k<t;k++){
13          scanf("%d",&arr[k]);
14      }
15      for(int i=0;i<t;i++){
16          int total=0;
17          for(int j=1;j<=arr[i];j++){
18              if(j%2==1){
19                  total+=j;
20              }
21          }
22          printf("%d\n",total);
23      }
24      return 0;
25  }
26
```

Line: 1 Col: 1

⬆ Upload Code as File   ☐ Test against custom input   Run Code   Submit Code