

# Dancing in Pairs

Bob is a dance teacher and he started dance classes recently. He observes a strange attendance pattern among his students. Initially, there are no students. On day  $i$ , a new student starts attending the class. The student stops attending the class, if and only if he has attended the class for  $i$  consecutive days. Also, the student resumes attending the class, if and only if he has not attended the class for  $i$  consecutive days.

We denote the student who starts coming on day  $i$  as student  $i$ .  
To mark attendance, `o` denotes present and `x` denotes absent.

For example, the schedule for student 1 from day 1 is as follows:  
`oxoxoxoxoxoxoxoxox...`

The schedule for the student 3 from day 1 is as follows:  
`xx000xxx000xxx000xxx...`

(Student 3 starts attending the class from day 3, and stops attending from day 6, and then starts attending from day 9, and so on. )

The schedule for the student 5 from day 1 is as follows. `xxxx00000xxxxx00000xxxxx...`

Bob wants his students to dance in pairs. However, if the number of students coming on day  $i$  is odd, then there will be someone who can't find a partner. So Bob wants to know if the number of students coming on day  $i$  is even or odd. We denote the number of students coming on day  $i$  as  $N(i)$ . Please find out whether  $N(i)$  is even or odd.

## Input format

The first line contains an integer,  $T$ , which denotes the number of test cases.  
For each test case, there is an integer  $i$

## Output Format

For each test case, if  $N(i)$  is even, then print `even`.  
If  $N(i)$  is odd, then print one line `odd`.

## Constraints

$$1 \leq T \leq 100$$
$$1 \leq i \leq 10^{18}$$

## Sample Input

```
4
1
2
3
4
```

## Sample Output

```
odd
odd
odd
even
```

## Explanation

The number of students coming on day 1 is 1: only student #1 attends the class. So  $N(1)=1$  and it is odd.

The number of students coming on day 2 is 1: student #2, so  $n(2)=1$  and it is odd.

The number of students coming on day 3 is 3: student #1, student #2, and student #3. So  $N(3)=3$  and it is odd.

The number of students coming on day 4 is 2: student #3 and student #4. So  $N(4)=2$  and it is even.