# **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.

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. xxxxoooooxxxxxxoooooxxxxxx...

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

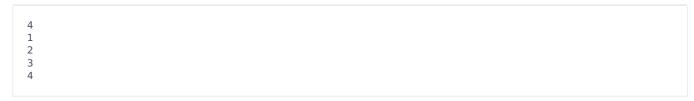
# **Output Format**

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

#### **Constraints**

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

# **Sample Input**



# **Sample Output**

odd			
odd			
odd			
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

IC	$\alpha$	าก	

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