1182 – Parity

Given an integer **n**, first we represent it in binary. Then we count the number of ones. We say **n** has odd parity if the number of one's is odd. Otherwise we say **n** has even parity. **21 = $(10101)_2$** has odd parity since the number of one's is **3**. **6 = $(110)_2$** has even parity.

Now you are given **n**, we have to say whether **n** has even or odd parity.

Input

Input starts with an integer **T (≤ 1000)**, denoting the number of test cases.

Each case contains an integer **n ($1 \le n < 2^{31}$)**.

Output

For each case, print the case number and **'odd'** if **n** has odd parity, otherwise print **'even'**.

Sample Input	Output for Sample Input
2 21 6	Case 1: odd Case 2: even