

**Problem statement**[Send feedback](#)

There is a song concert going to happen in the city. The price of each ticket is equal to the number obtained after reversing the bits of a given 32 bits unsigned integer ' $n$ '.

**Detailed explanation** ( Input/output format, Notes, Images )**Sample Input 1 :**

```
2
0
12
```

**Sample Output 1:**

```
0
805306368
```

**Explanation For Sample Input 1 :**

For the first test case :

Since the given number  $N = 0$  is represented as 000000000000000000000000000000 in its binary representation. So after reversing the bits, it will become 000000000000000000000000000000 which is equal to 0 only. So the output is 0.

For the second test case :

Since the given number  $N = 12$  is represented as 00000000000000000000000000001100 in its binary representation. So after reversing the bits, it will become 011000000000000000000000000000, which is equal to 805306368 only. So the output is 805306368.

**Sample Input 2 :**

```
2
6
4
```

**Sample Output 2 :**

```
1610612736
536870912
```

**Explanation For Sample Input 1 :**

For the first test case :

Since the given number  $N = 6$  is represented as 0000000000000000000000000000110 in its binary representation. So after reversing the bits, it will become 011000000000000000000000000000, which is equal to 1610612736.

For the second test case :

Since the given number  $N = 4$  is represented as 0000000000000000000000000000100 in its binary representation. So after reversing the bits, it will become 001000000000000000000000000000, which is equal to 536870912 only.

**Expected time complexity:**

The expected time complexity is  $O(\log(n))$ .

**Constraints :**

$$1 \leq T \leq 10$$

$$0 \leq N \leq 2^{32}$$

Time Limit: 1 sec