Consecutive Set Bits

Given a number N, find the max number of consecutive set bits in the number.

Input Format

First line of input contains T - number of test cases. Its followed by T lines, each containing a single number N.

Constraints

$1 <= T <= 10000$
$0 <= N <= 10^{18}$

Output Format

For each test case, print the max number of consecutive set bits, separated by newline.

Sample Input 0

```
3
5
15
13
```

Sample Output 0

```
1
4
2
```

Explanation 0

Test Case 1
Binary Representation of 5: 101
Maximum Consecutive Set Bits: 1

Test Case 2
Binary Representation of 15: 1111
Maximum Consecutive Set Bits: 4

Test Case 3
Binary Representation of 13: 1101
Maximum Consecutive Set Bits: 2