# **Consecutive 1's in Binary Numbers**



Given a base-10 integer, n, convert it to binary (base-2). Then find and print the base-10 integer denoting the maximum number of consecutive 1's in n's binary representation.

### **Input Format**

A single integer, n.

#### **Constraints**

•  $1 \le n \le 10^6$ 

# **Output Format**

Print a single base-10 integer denoting the maximum number of consecutive 1's in the binary representation of n.

# Sample Input 1

5

# **Sample Output 1**

1

### Sample Input 2

13

# **Sample Output 2**

2

#### **Explanation**

# Sample Case 1:

The binary representation of  $\mathbf{5}$  is  $\mathbf{101}$ , so the maximum number of consecutive  $\mathbf{1}$ 's is  $\mathbf{1}$ .

#### Sample Case 2:

The binary representation of 13 is 1101, so the maximum number of consecutive 1's is 2.