#### **Objective**

Today, we're working with binary numbers. Check out the <u>Tutorial</u> tab for learning materials and an instructional video!

#### Task

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 5 is 101, so the maximum number of consecutive 1's is 1.

# Sample Case 2:

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