



# STUDENT REPORT

## DETAILS

Name

A.Padmini

Roll Number

3BR21CS002

## EXPERIMENT

Title

SYMMETRICAL NUMBER

Description

John is an artist who loves everything to be symmetrical. He is given an integer N and he wants to make the number symmetrical in its binary representation, which means all the bits are set in the binary form of a number. Your task is to find and return an integer value representing the smallest number which John can add to make the given number symmetrical

Note: Set bit means 1 in the binary form

Input Specification:

Input1: An integer value N

Output Specification:

Return an integer value representing the smallest number which John can add to make the given number symmetrical

Example:

Sample Input:

5

Sample Output:

7

Explanation:

Binary representation of 5 is 101. Setting all the bits the binary number becomes 111. Converting this to decimal we have 7.

Source Code:

```
n=int(input().strip())
no_bits=n.bit_length()
set_num=(1 << no_bits)-1
print(set_num)
```

## RESULT

5 / 5 Test Cases Passed | 100 %

3BR21CS0023BR21CS0023BR21CS0023BR21CS0023BR21CS0023BR21CS0023BR21CS002