import java.util.Scanner;  
  
public class JosephusProblem {  
 public static int *flag* = 0;  
 public static void main (String[] args) {  
 Scanner input = new Scanner(System.*in*);  
 System.*out*.print("الرجاء إدخال رقم:");  
 int number = input.nextInt();  
 *josephus\_1*(number);  
 System.*out*.println("المحظوظ هو 1"+ *flag*);  
 int[] arrNumbers = new int[number];  
 for (int i = 0; i < arrNumbers.length; i++) {  
 arrNumbers[i] = i + 1;  
 }  
 *josephus\_2*(arrNumbers);  
 }  
  
 private static void josephus\_1(int numbers) {  
  
 if (numbers == 1) {  
 *flag* = 1;  
 } else if (numbers % 2 == 0) {  
 *josephus\_1*(numbers / 2);  
 *flag* = *flag* \* 2 - 1;  
 } else if (numbers % 2 != 0) {  
 *josephus\_1*((numbers - 1) / 2);  
 *flag* = *flag* \* 2 + 1;  
 }  
 }  
 private static void josephus\_2 (int[] arrNumbers) {  
  
 int length = arrNumbers.length;  
 int[] arrNumberNew = new int[0];  
 while (length != 1) {  
  
 if (length % 2 == 0) {  
 length = length / 2;  
 arrNumberNew = new int[length];  
 // يبدأ من 1  
 for (int i = 0; i < arrNumberNew.length; i++)  
 arrNumberNew[i] = arrNumbers[2 \* i];  
 } else if (length % 2 != 0) {  
 length = length / 2;  
 arrNumberNew = new int[length];  
 for (int i = 0; i < arrNumberNew.length; i++)  
 arrNumberNew[i] = arrNumbers[2 \* i + 2];  
 }  
 arrNumbers = arrNumberNew;  
 }  
 System.*out*.println("الناجي 2:" + arrNumberNew[0]);  
 }  
}