## 1017. Convert to Base -2

# Description

Given an integer n, return a binary string representing its representation in base -2.

Note that the returned string should not have leading zeros unless the string is "0".

## Example 1:

```
Input: n = 2
Output: "110"
Explantion: (-2) 2 + (-2) 1 = 2
```

#### Example 2:

```
Input: n = 3
Output: "111"
Explantion: (-2) 2 + (-2) 1 + (-2) 0 = 3
```

#### Example 3:

```
Input: n = 4
Output: "100"
Explantion: (-2)^2 = 4
```

### **Constraints:**

```
• 0 <= n <= 10 <sup>9</sup>
```