

Problem 1017: Convert to Base -2

Problem Information

Difficulty: Medium

Acceptance Rate: 61.57%

Paid Only: No

Tags: Math

Problem 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"` **Explanation:** $(-2)^2 + (-2)^1 = 2$

Example 2:

Input: `n = 3` **Output:** `"111"` **Explanation:** $(-2)^2 + (-2)^1 + (-2)^0 = 3$

Example 3:

Input: `n = 4` **Output:** `"100"` **Explanation:** $(-2)^2 = 4$

Constraints:

`0 ≤ n ≤ 109`

Code Snippets

C++:

```
class Solution {  
public:  
    string baseNeg2(int n) {  
  
    }  
};
```

Java:

```
class Solution {  
    public String baseNeg2(int n) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def baseNeg2(self, n: int) -> str:
```