Problem 693: Binary Number with Alternating Bits

Problem Information

Difficulty: Easy
Acceptance Rate: 63.85%
Paid Only: No
Tags: Bit Manipulation

Problem Description

Given a positive integer, check whether it has alternating bits: namely, if two adjacent bits will always have different values.

Example 1:

Input: n = 5 **Output:** true **Explanation:** The binary representation of 5 is: 101

Example 2:

Input: n = 7 **Output:** false **Explanation:** The binary representation of 7 is: 111.

Example 3:

Input: n = 11 **Output:** false **Explanation:** The binary representation of 11 is: 1011.

Constraints:

* `1 <= n <= 231 - 1`

Code Snippets

C++:

```
class Solution {
public:
bool hasAlternatingBits(int n) {

}
};
```

Java:

```
class Solution {
public boolean hasAlternatingBits(int n) {

}
}
```

Python3:

```
class Solution:
def hasAlternatingBits(self, n: int) -> bool:
```