Problem 1486: XOR Operation in an Array

Problem Information

Difficulty: Easy
Acceptance Rate: 87.23%
Paid Only: No
Tags: Math, Bit Manipulation

Problem Description

You are given an integer `n` and an integer `start`.

Define an array `nums` where `nums[i] = start + 2 * i` (**0-indexed**) and `n == nums.length`.

Return _the bitwise XOR of all elements of_ `nums`.

Example 1:

Input: n = 5, start = 0 **Output:** 8 **Explanation:** Array nums is equal to [0, 2, 4, 6, 8] where (0 ^ 2 ^ 4 ^ 6 ^ 8) = 8. Where "^" corresponds to bitwise XOR operator.

Example 2:

Input: n = 4, start = 3 **Output:** 8 **Explanation:** Array nums is equal to [3, 5, 7, 9] where (3 ^ 5 ^ 7 ^ 9) = 8.

Constraints:

* `1 <= n <= 1000` * `0 <= start <= 1000` * `n == nums.length`

Code Snippets

C++:

```
class Solution {
public:
int xorOperation(int n, int start) {

}
};
```

Java:

```
class Solution {
public int xorOperation(int n, int start) {

}
}
```

Python3:

```
class Solution:
def xorOperation(self, n: int, start: int) -> int:
```