1290. Convert Binary Number in a Linked List to Integer
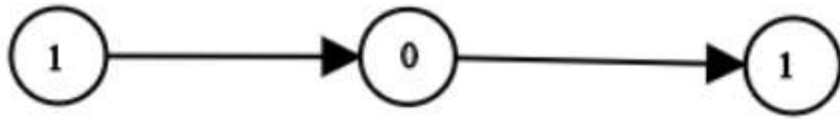
Given `head` which is a reference node to a singly-linked list. The value of each node in the linked list is either 0 or 1. The linked list holds the binary representation of a number.

Return the *decimal value* of the number in the linked list.

Example 1:


```
Input: head = [1,0,1]
Output: 5
Explanation: (101) in base 2 = (5) in base 10
```

Example 2:

```
Input: head = [0]
Output: 0
```

Example 3:

```
Input: head = [1]
Output: 1
```

Example 4:

```
Input: head = [1,0,0,1,0,0,1,1,1,0,0,0,0,0,0]
Output: 18880
```

Example 5:

```
Input: head = [0,0]
Output: 0
```

Constraints:

- The Linked List is not empty.
- Number of nodes will not exceed `30`.
- Each node's value is either `0` or `1`.

Related Topics

Linked List   Bit Manipulation

Hide Hint 1

Traverse the linked list and store all values in a string or array. convert the values obtained to decimal value.

Hide Hint 2

You can solve the problem in O(1) memory using bits operation. use shift left operation (<<) and or operation (|) to get the decimal value in one operation.