Problem #1290: Convert Binary Number in a Linked List to Integer

<https://leetcode.com/problems/convert-binary-number-in-a-linked-list-to-integer/>

Solution:

<https://leetcode.com/problems/convert-binary-number-in-a-linked-list-to-integer/discuss/919509/Simple-Python-3-Solution-Runtime-beats-80.37>

1. Traverse the linked list, get the values and store them in an array.
2. Reverse the array
3. Multiply each element of the array by 2 raised to the power of its index.
4. Get the sum of the products.

# Definition for singly-linked list.

# class ListNode:

# def \_\_init\_\_(self, val=0, next=None):

# self.val = val

# self.next = next

class Solution:

def getDecimalValue(self, head: ListNode) -> int:

current = head

arr = []

while current:

arr.append(current.val)

current = current.next

return(sum(x\*(2\*\*i) for i, x in enumerate(arr[::-1])))

# Last line is the same as follows:

sum = 0

arr = arr[::-1]

for i in range(len(arr) - 1 ):

     sum += arr[i] \* (2 \*\* i)

return sum