

PROBLEM

Reverse Bits



Easy Accuracy: 53.96% Submissions: 50K+ Points: 2

Given a number x , reverse its binary form and return the answer in decimal.

Example 1:

Input:

$x = 1$

Output:

2147483648

Explanation:

Binary of 1 in 32 bits representation-

00000000000000000000000000000001

Reversing the binary form we get,

10000000000000000000000000000000,

whose decimal value is 2147483648.

Example 2:

Input:

$x = 5$

Output:

2684354560

Explanation:

Binary of 5 in 32 bits representation-

00000000000000000000000000000101

Reversing the binary form we get,

10100000000000000000000000000000,

whose decimal value is 2684354560.

Your Task:

You don't need to read input or print anything. Your task is to complete the function `reversedBits()` which takes an Integer x as input and returns the reverse binary form of x in decimal form.

Expected Time Complexity: $O(\log(x))$

Expected Auxiliary Space: $O(1)$

Constraints:

$0 \leq x < 2^{32}$

CODE

#User function Template for python3

class Solution:

def reversedBits(self, x):

code here

res = 0

for i in range(0,32):

res = res << 1

bit = x%2

res+=bit

x = x >> 1

return res