**Problem #1572: Matrix Diagonal Sum**

<https://leetcode.com/problems/matrix-diagonal-sum/>

**My Solution:**

1. If the matrix mat is 1 x 1, then return the single element in the matrix.
2. Let n be the length of mat.
3. Initialize total to 0.
4. For I in range of n, increment total by mat at row I and col i.

If I is not equal to (n – 1 – i), then increment total by mat at row (n – 1 -i) and column i.

1. Return total.

class Solution:

def diagonalSum(self, mat: List[List[int]]) -> int:

if len(mat) == 1:

return mat[0][0]

n = len(mat)

total = 0

for i in range(n):

total += mat[i][i]

if i != n - 1 -i:

total += mat[n - 1 - i][i]

return total