Diagonal Difference ★

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Given a square matrix, calculate the absolute difference between the sums of its diagonals.

For example, the square matrix arr is shown below:

```
1 2 3
4 5 6
9 8 9
```

The left-to-right diagonal = $1 + 5 + 9 = 15$. The right to left diagonal = $3 + 5 + 9 = 17$. Their absolute difference is $|15 - 17| = 2$.

Function description

Complete the $diagonalDifference$ function in the editor below.

diagonalDifference takes the following parameter:

- int arr[n][m]: an array of integers

Return

- int: the absolute diagonal difference

Input Format

The first line contains a single integer, n, the number of rows and columns in the square matrix arr.
Each of the next n lines describes a row, $arr[i]$, and consists of n space-separated integers $arr[i][j]$.

Constraints

- $-100 \le arr[i][j] \le 100$

Output Format

Return the absolute difference between the sums of the matrix's two diagonals as a single integer.

Sample Input

```
3
11 2 4
4 5 6
10 8 -12
```

Sample Output

```
15
```

Explanation

The primary diagonal is:

```
11
   5
     -12
```

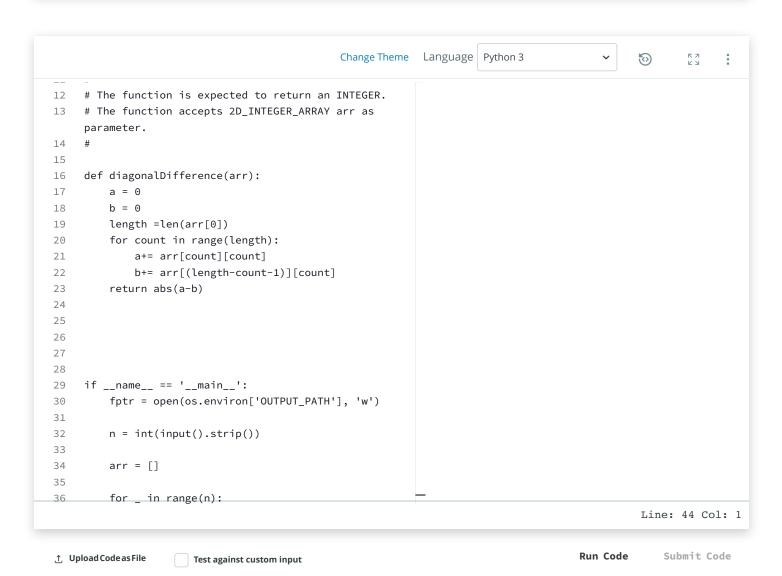Sum across the primary diagonal: 11 + 5 - 12 = 4

The secondary diagonal is:

```
    4
  5
10
```

Sum across the secondary diagonal: 4 + 5 + 10 = 19

Difference: |4 - 19| = 15

Note: |x| is the absolute value of x

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```python
12      # The function is expected to return an INTEGER.
13      # The function accepts 2D_INTEGER_ARRAY arr as
        parameter.
14      #
15
16      def diagonalDifference(arr):
17          a = 0
18          b = 0
19          length =len(arr[0])
20          for count in range(length):
21              a+= arr[count][count]
22              b+= arr[(length-count-1)][count]
23          return abs(a-b)
24
25
26
27
28
29      if __name__ == '__main__':
30          fptr = open(os.environ['OUTPUT_PATH'], 'w')
31
32          n = int(input().strip())
33
34          arr = []
35
36          for _ in range(n):
```

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