**Problem #1779: Find Nearest Point that Has the Same X or Y Coordinate**

<https://leetcode.com/problems/find-nearest-point-that-has-the-same-x-or-y-coordinate/description/>

**My Solution:**

1. Initialize idx to -1.
2. Initialize minDist to infinity.
3. Iterate through points using enumerate so that index of the point I is obtained. If the point is valid, that is if the point’s x coordinate is x or y coordinate is y, then calculate the Manhattan distance between the point and (x, y) and call it dist.
4. If dist is less than minDist, then update minDist with dist and idx with i..
5. Return idx.

class Solution:

def nearestValidPoint(self, x: int, y: int, points: List[List[int]]) -> int:

idx = -1 #smallest index initialized

minDist = math.inf #smallest Manhattan distance initialization

for i, point in enumerate(points):

if x == point[0] or y == point[1]: # check point is valid

dist = abs(x - point[0]) + abs(y - point[1])

if dist < minDist: # update minDist is dist is smaller

minDist = dist

idx = i

return idx