This is problem to convert all the negative coordinates to a positive coordinates;

The agenda is to get all the coordinates in 0 or positive values keeping the relative distance same;

We can add or delete any number from the coordinates ; however graph should not be changed;

Input: [(1,-2), (-2, 4), (-1,-1),(-8, -3), (0, 4), (10,-3)]

Output : [(9,6), (6, 12), (7,7),(0, 5), (8, 12), (18,5)]

def convert\_to\_positive(coordinates):

min\_value = min(min(x, y) for x, y in coordinates)

offset = abs(min\_value)

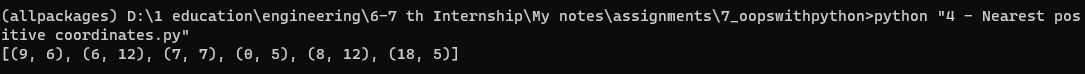
new\_coordinates = [(x + offset, y + offset) for x, y in coordinates]

return new\_coordinates

coordinates = [(1,-2), (-2, 4), (-1,-1),(-8, -3), (0, 4), (10,-3)]

print(convert\_to\_positive(coordinates))

OUTPUT



ALTERNATIVE

def transform\_coordinates(coordinates):

min\_x = min(coord[0] for coord in coordinates)

min\_y = min(coord[1] for coord in coordinates)

transformed\_coordinates = [(coord[0] - min\_x, coord[1] - min\_y) for coord in coordinates]

return transformed\_coordinates

input\_coordinates = [(1, -2), (-2, 4), (-1, -1), (-8, -3), (0, 4), (10, -3)]

output\_coordinates = transform\_coordinates(input\_coordinates)

print(output\_coordinates)