

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

```
(allpackages) D:\1 education\engineering\6-7 th Internship\My notes\assignments\7_oopswithpython>python "4 - Nearest positive coordinates.py"
[(9, 6), (6, 12), (7, 7), (0, 5), (8, 12), (18, 5)]
```

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)
```