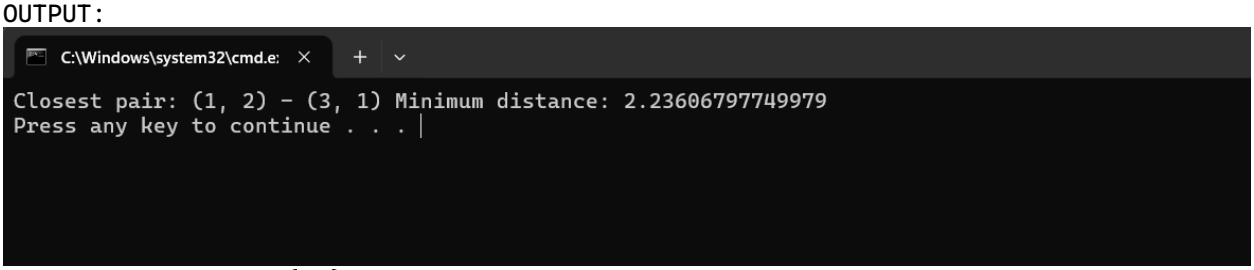
139)Finding closest pair points in 2D space

CODE:

```
import math

def calculate_distance(point1, point2):
    return math.sqrt((point1[0] - point2[0])**2 + (point1[1] - point2[1])**2)

def find_closest_pair(points):
    min_distance = float('inf')
    closest_pair = None

    for i in range(len(points)):
        for j in range(i + 1, len(points)):
            distance = calculate_distance(points[i], points[j])
            if distance < min_distance:
                min_distance = distance
                closest_pair = (points[i], points[j])

    return closest_pair, min_distance

points = [(1, 2), (4, 5), (7, 8), (3, 1)]

closest_pair, min_distance = find_closest_pair(points)

print(f"Closest pair: {closest_pair[0]} - {closest_pair[1]} Minimum distance:
{min_distance}")
```

OUTPUT:



TIME COMPLEXITY : O(n2)