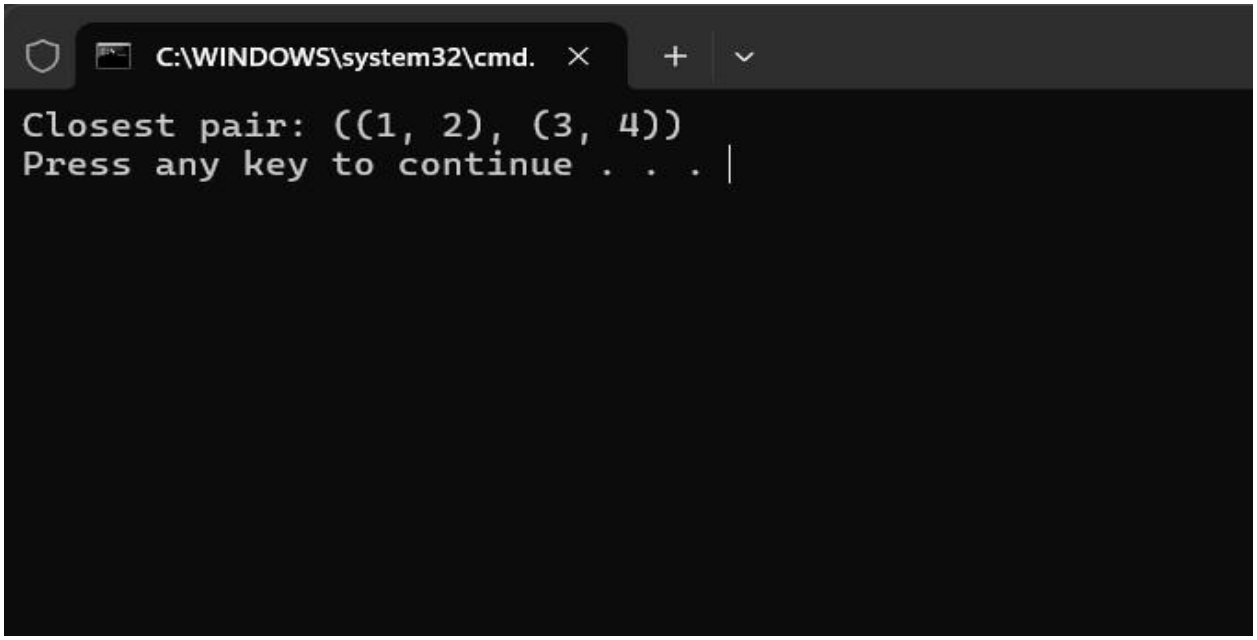
76)Closest Pair

CODE:

```
import math
 def distance(p1, p2):
    return math.sqrt((p1[0] - p2[0])**2 + (p1[1] - p2[1])**2)
 def closest_pair(points):
min_dist = float('inf')
closest_pair = None
   n = len(points)
    for i in range(n):
       for j in range(i + 1, n):
          dist = distance(points[i], points[j])
if dist < min_dist:
             min_dist = dist
             closest_pair = (points[i], points[j])
   return closest_pair

points = [(1, 2), (3, 4), (5, 6), (7, 8)]
closest_pair_result = closest_pair(points)
 print("Closest pair:", closest_pair_result)
```

OUTPUT:



TIME COMPLEXITY : $O(n^2)$