CSE221

Assignment : 02

```python
import math

def euclidean_dist (p1, p2):
    return { math.sqrt ((p1 [0] - p2 [0]) **2 + (p1 [1] - p2 [1]) **2)

def closest_pair (points):
    n = len (points)
    if n < 1:
        return None, None, float ('inf')

    min_dist = float ('inf')
    closest_p1 = None
    closest_p2 = None

    for i in range (n):
        for j in range (i + 1, n):
            dist = e_dist (points [i] [1], points [j] [1])
            if dist < min_dist:
                min_dist = dist
```

```python
        closest_p1 = point[i][0]
        closest_p2 = points[j][0]

    return closest_p1, closest_p2, min_dist


if __name__ == "__main__":
    n = int(input())
    points = []
    for i in range(n):
        x, y = map(int, input().split())
        points.append((i+1, (x, y)))

    p1, p2, dist = closest_pair(points)

    print(p1, p2, "{:.6f}".format(dist))
```