29. Given an array of points where points[i] = [xi, yi] represents a point on the X-Y plane and an integer k, return the k closest points to the origin (0, 0).The distance between two points on the X-Y plane is the Euclidean distance (i.e., √(x1 - x2)2 + (y1 - y2)2). You may return the answer in any order. The answer is guaranteed to be unique (except for the order that it is in).

Program: import heapq

```
def kClosest(points, k):
    heap = []
    for x, y in points:
        dist = -(x*x + y*y)
        if len(heap) == k:
            heapq.heappushpop(heap, (dist, x, y))
        else:
            heapq.heappush(heap, (dist, x, y))
    return [(x, y) for (dist, x, y) in heap]
points = [[1, 3], [-2, 2], [5, 8], [0, 1]]
k = 2
print(kClosest(points, k))
```

Output:

```
[(-2, 2), (0, 1)]

=== Code Execution Successful ===
```

Time complexity:O(nlogk)