```
QuickHull(A):
// A[0..n-1] set of points of size n
// all points lie in positive X-Y axis
Sort A in ascending order of x coordinates, break ties with ascending y coordinates
hull ← {A[0], A[n-1]}
leftMost = A[0], rightMost = A[n-1]
remove leftMost and rightMost points from A

// Divide A into two subarrays with points on top half and points of bottom half of
// the line formed by A[0] and A[n-1]
topPoints ← { }, bottomPoints ← { }
for each i ← 0 to n-2 do
    if orientation of A[i] on top side of leftMost and rightMost points
        topPoints ← topPoints ∪ {A[i]}
    else if orientation of A[i] on bottom side of leftMost and rightMost points
        bottomPoints ← bottomPoints ∪ {A[i]}
    else: skip if collinear orientation

partition(topPoints, leftMost, rightMost, hull)
partition(bottomPoints, leftMost, rightMost, hull)

partition(points, left, right, hull)
farthest_pt = NIL, farthest_dist = 0
for i ← left to right do
    if distance of points[i] from line formed by points[left] and points[right]
        farthest_pt = points[i], farthest_dist = dist of points[i] to (line points[left] points[right])

hull ← hull ∪ {farthest_pt}
remove all points inside and on the edges of Δ(points[left], points[right], farthest_pt)
left_to_farthest_points ← { }, farthest_to_right_points ← { }
for i ← 0 to # of remaining points
    if points[i] is between (line points[left], farthest_point)
        left_to_farthest_points ← left_to_farthest_points ∪ {points[i]}
    else
        farthest_to_right_points ← farthest_to_right_points ∪ {points[i]}

partition(left_to_farthest_points, left, farthest_pt, hull)
partition(farthest_to_right_points, farthest_pt, right, hull)
```