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Recitation: 7

Problem 1

Points:

work with zimeng liu

"I did not consult anyone except my group members".

non-class material: https://en.wikipedia.org/wiki/Gift$_w rapping_a lgorithm$

Problem 2

Points:

1.1. the lowest point is p9

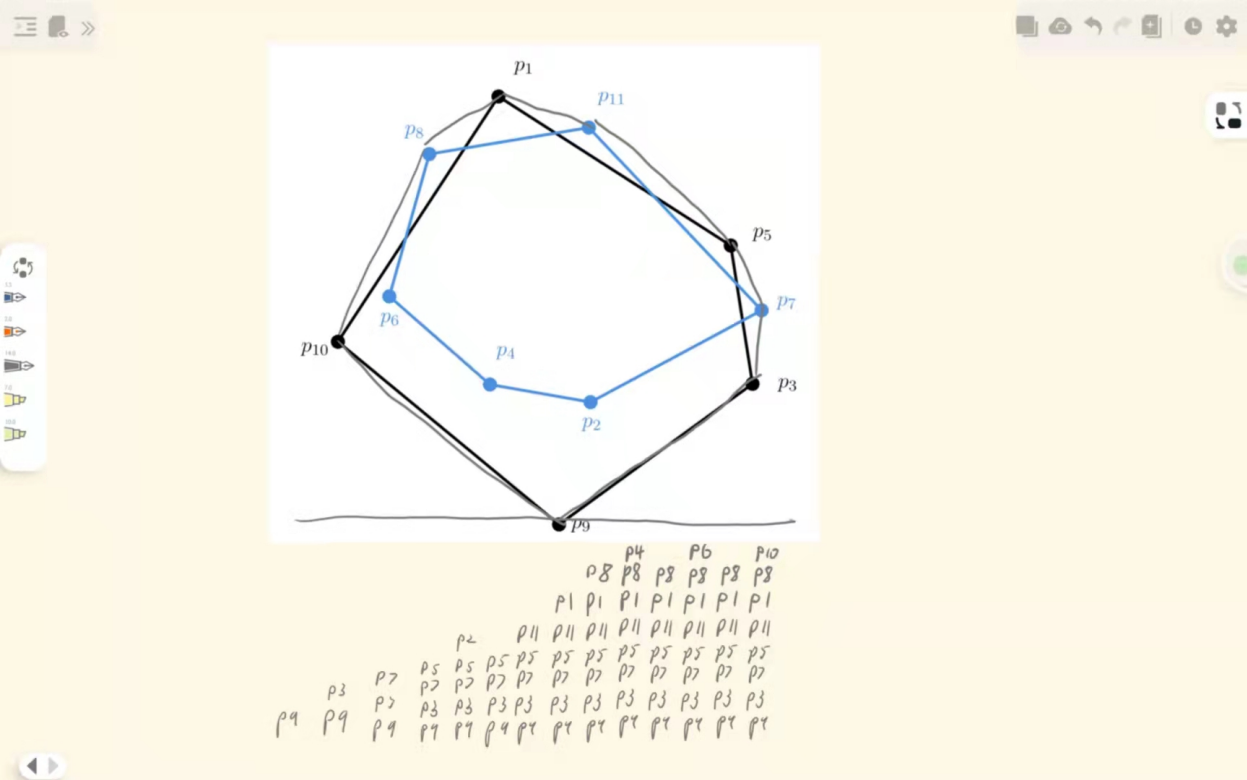
1.2.(p9, p3, p5, p1, p10)

1.3.$C_{2a} = (p7, p11, p8)$ and $C_{2b} = (p2, p6, p4)$

1.4.(p7, p2, p11, p4, p8, p6)

1.5.(p9, p3, p7, p5, p11, p1, p8, p10)

1.6.



push p9

push p3

push p7

push p5

push p2

pop p2

push p11

push p1

push p4

pop p4

push p8

push p6

pop p6

push p10

Problem 3 **Points:**

2. First, put them in x-y Coordinates, find the left most point L and right most points R load slope a with point L, and check if there is any point above the line, if there is, the new point will be L, loop the process load slope a with point R, and check if there is any point under the line, if there is, the new point will be R, loop the process

and we will have the point b1 b2 as L and R.

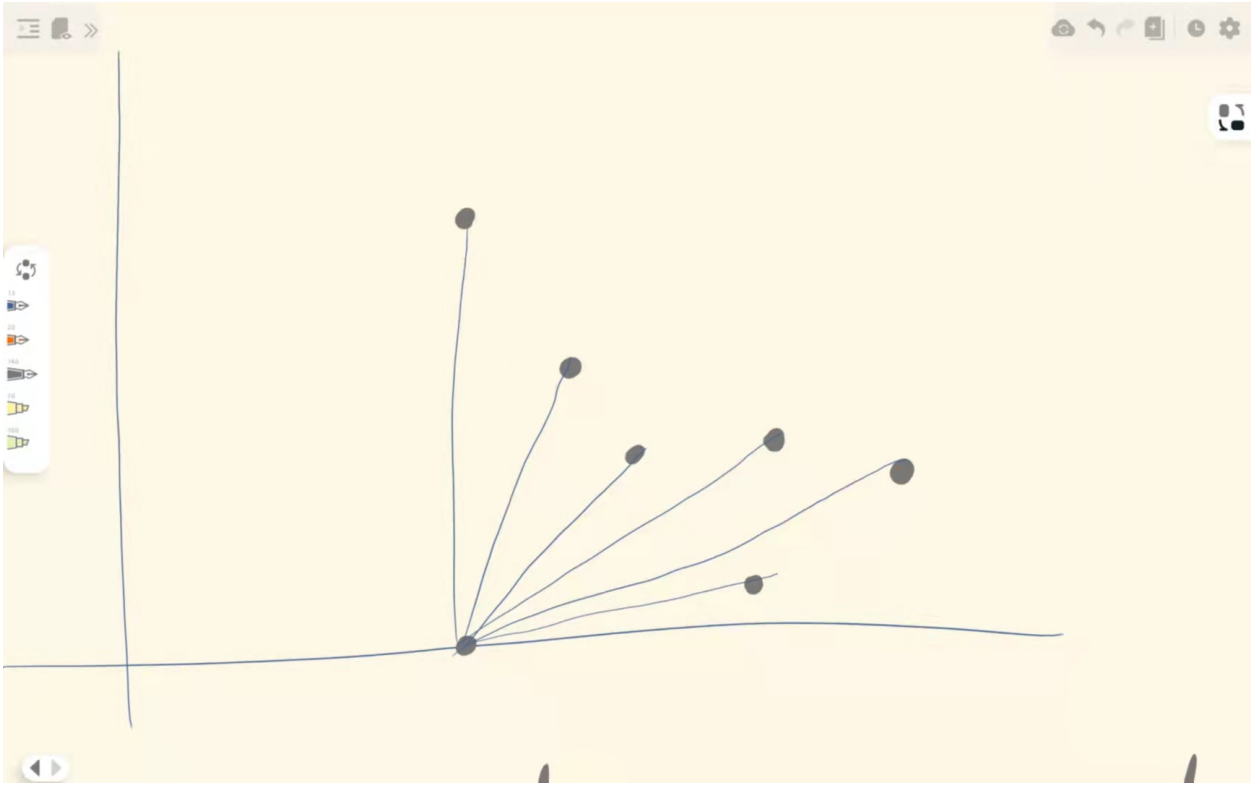
run time will be O(n)

Problem 4

Points:

3.1 I don't know how to answer this question

3.2



Problem 5 **Points:**

first find the point p* with smallest y-coordinate, then draw a line counterclockwise with point P* as the center

as the line touch the first point remember angle as x, mark the new point as center, record the point and draw a line counterclockwise start from the angle x

loop the previous step until you meet the initial p* point

and running time will be O(nlogn)