**Project 2 Part 2 (square with min area)**

Name: Aditya Vasantharao Period: 3

Date: 10/8/21

Is your lab name l022?(lowercase L followed by digits 022) Yes

Did you comment out the call to part1 method? Yes

Did you create a class for a Point? Yes

Did you create a class for a Line? Yes

List all classes you created in this project: Point, Line, Circle, Triangle

Did you use the precision for the points like in the sample? Yes

Did you test your file on a school computer using jupyterhub/ssh? Yes

Did your file compile and run on school computer (jupyterhub)? Yes

Paste here **2 sets of clear picture/content** of the points.txt, output.txt and output.ppm you created when running 2 times your lab :

* one of the runs should be on the sample provided by Mr. Jurj;

points.txt:

(0.18161564989165929,0.49650563066499831) , (0.20331431012909329,0.66115298928800315) , (0.45457319864497819,0.36802270577105012) , (0.86330759605700857,0.82033753471480453)

output.txt:

(0.18161564989165929,0.49650563066499831) , (0.20331431012909329,0.66115298928800315) , (0.45457319864497819,0.36802270577105012) , (0.86330759605700857,0.82033753471480453)

(0.58863052673951921,0.28691864991369875) , (0.44965933148143988,0.35848004700834973) , (0.52122072857609092,0.49745124226642912) , (0.66019192383417014,0.42588984517177825) Area = 0.02443402666559753

(0.27195034142230357,0.37622156372823401) , (0.34174493950384793,0.28328741002475732) , (0.43467909320732451,0.35308200810630169) , (0.36488449512578014,0.44601616180977832) Area = 0.01350804284594574

(0.27776345099379884,0.94567679589967180) , (0.21626596678621327,0.65838060894706696) , (0.50356215373881785,0.59688312473948135) , (0.56505963794640346,0.88417931169208630) Area = 0.08632103960136830

(0.20259839176784314,0.45822101773328322) , (0.11723405021564340,0.61397476973488152) , (0.27298780221724162,0.69933911128708126) , (0.35835214376944141,0.54358535928548291) Area = 0.03154630207121600

(0.26976728773113051,0.54851018465181800) , (0.32787290072129732,0.58278925832243056) , (0.36215197439190994,0.52468364533226364) , (0.30404636140174301,0.49040457166165113) Area = 0.00455131715267833

(0.23229804918860958,0.50597175896598379) , (0.42218393076071875,0.54143740665515094) , (0.38671828307155165,0.73132328822726012) , (0.19683240149944251,0.69585764053809296) Area = 0.03731446018642919

Diagram, engineering drawing

Description automatically generated

* the other run on a random set of points.txt your part1 generated!! :

points.txt:

(0.87594225898007139,0.43784905545213171) , (0.84502700888088622,0.55366679891354109) , (0.16861476485488450,0.59639271217993717) , (0.36097293008209480,0.36487929929502244)

output.txt:

(0.87594225898007139,0.43784905545213171) , (0.84502700888088622,0.55366679891354109) , (0.16861476485488450,0.59639271217993717) , (0.36097293008209480,0.36487929929502244)

(0.38173129348283213,0.29370658522686427) , (0.26668348024659655,0.26015153049997991) , (0.23312842551971222,0.37519934373621550) , (0.34817623875594778,0.40875439846309980) Area = 0.01436194102816395

(0.68932328694235856,0.15114916504640763) , (0.73792568626962729,0.22581629244740559) , (0.66325855886862928,0.27441869177467437) , (0.61465615954136055,0.19975156437367642) Area = 0.00793737313468415

(0.57041034561329074,0.65694383350106866) , (0.80067765785639500,0.49182076955696197) , (0.63555459391228830,0.26155345731385754) , (0.40528728166918410,0.42667652125796418) Area = 0.08028866133395283

(0.47368224517261831,0.18533270519197670) , (0.90591842602488859,0.45666641744966102) , (0.63458471376720427,0.88890259830193130) , (0.20234853291493404,0.61756888604424698) Area = 0.26045009944529229

(0.80798882476299205,0.52468137125763192) , (0.53033725758375772,0.87947033583272560) , (0.17554829300866398,0.60181876865349127) , (0.45319986018789848,0.24702980407839739) Area = 0.20296560214135198

(0.92039340386281843,0.49757860905812129) , (0.69975999968358338,0.20111077280874418) , (0.40329216343420615,0.42174417698797934) , (0.62392556761344131,0.71821201323735662) Area = 0.13657227697010518

Diagram, engineering drawing

Description automatically generated