**Project 2 Part 1**

Name: \_Riya Dev\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_5\_\_\_\_\_\_

Date: \_10/8/2021\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Part 1:  
Create a method called part1 in which:  
Generate 3 random points (optional: check that they are not collinear), then generate a 4th random point such that no point among the 4 points lies inside the triangle formed by the other 3 points in the square unit ([0,1]x[0,1]). If the point generated fails the condition, you discard it then you keep generating a new random 4th point until the condition is true.  
Once you have 4 such points save the 4 points in a file called points.txt following the format of the file:points.txt

(notice the precision, maybe look up how to use setprecision when you cout, or how to use fprintf)

When you finish submit the file l021.cpp file (lowercase L followed by th digits 021) and also complete and submit the following document, with the examples of points.txto btained in 2 random runs: Project 2 Part 1 document.docx

Is your lab name l021?(lowercase L followed by digits 021) \_yes\_\_\_\_\_\_\_\_\_\_

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/terminal? \_yes\_\_\_\_\_\_\_\_\_\_

Did you compile using c++11? \_yes\_\_\_\_\_\_\_\_\_\_

Paste here the **content** of the points.txt you created when running 2 times your lab:

(0.70235297708059941,0.67159031952879422),(0.13953062532425917,0.9481795709097568),(0.36661885433515429,0.63228247932370985),(0.60963774529251991,0.84243293557542653)

(0.70754112369151889,0.72838526566362494),(0.48844874416333506,0.13458662678914762),(0.73497726371044036,0.86367381817072053),(0.024292733542893765,0.70509964293343919)