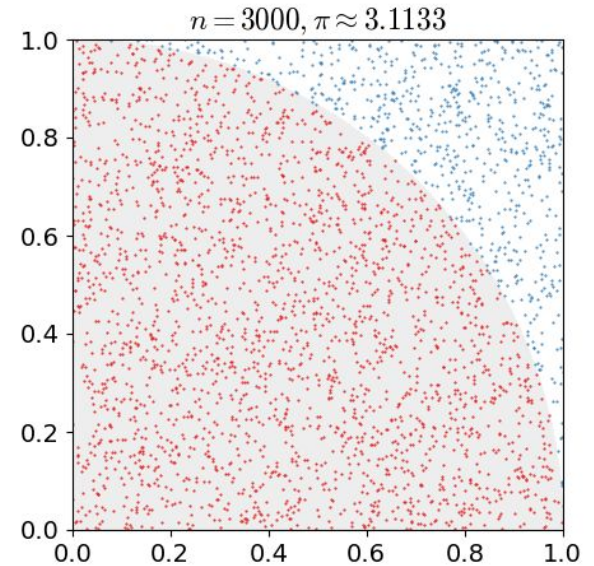


Coding Challenge #2

- ❖ The purpose of this challenge is to perform a Monte-Carlo analysis on the lift generated by an aircraft.
- ❖ Aircraft Parameters are detailed in header of Coding Challenge 2 template.
- ❖ Steps
 - 1) Sample S , C_L , ρ , and V 10,000 times.
 - 2) Calculate lift in kilonewtons for each of the 10,000 samplings/simulations.
 - 3) Calculate the best estimate and error for lift
 - 4) Plot a histogram of L .
 - Bonus 1) Calculate drag in kilonewtons for each of the 10,000 samplings/simulations.
 - Bonus 2) Make a scatterplot of Lift vs Drag.



As the # of random instances increase the accuracy and confidence in a true solution increase.

Coding Challenge Rubric

Points Possible	Expectations
1	Present and collaborating with group members.
1	Submitted code that runs without errors.
1	Code is neat, commented, file name follows naming convention, and is properly published and submitted.
2	Code properly completes all outlined tasks
Total: 5	If all expectations are met 5/5 points will be awarded.

- The best submission (must include completed bonus parts) will be shown off at the start of next week's coding challenge.