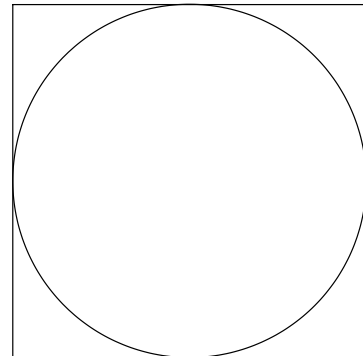


Create a Java Class named Darts which permits the user to estimate the value of pi to a minimum of 5 decimal places using the simulation of throwing darts at a dart board.

Assume all “throws” at the dart board strike within the square that encompasses the circle (dart board.)

Use a minimum of 5,000 simulations (throws) to converge on the estimated value of pi. Permit the number of simulations and decimal place accuracy (<11 decimal places) to be input by the user.



Test your class Darts.java with a tester class named PiApp.

Place copies of both classes' code in a MS Word.docx along with the input/output.

Name this word file: Project3-LastName.docx

Attach this word.docx file as an email attachment to [mheinen\\_1@msn.com](mailto:mheinen_1@msn.com) .

Ensure this word.docx file is included in your OneNote file shared with Mr. Heinen.

Bonus:

- Include an additional class named Buffon which uses the Buffon Needle Method to similarly obtain the value of pi. Research this method as necessary. Permit the user to select either the Dart or Buffon class to calculate the value of pi.
- Determine which method converges on a specified value of pi with the least number of iterations.