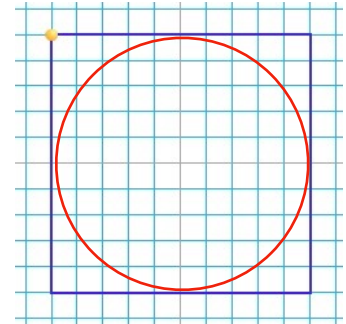


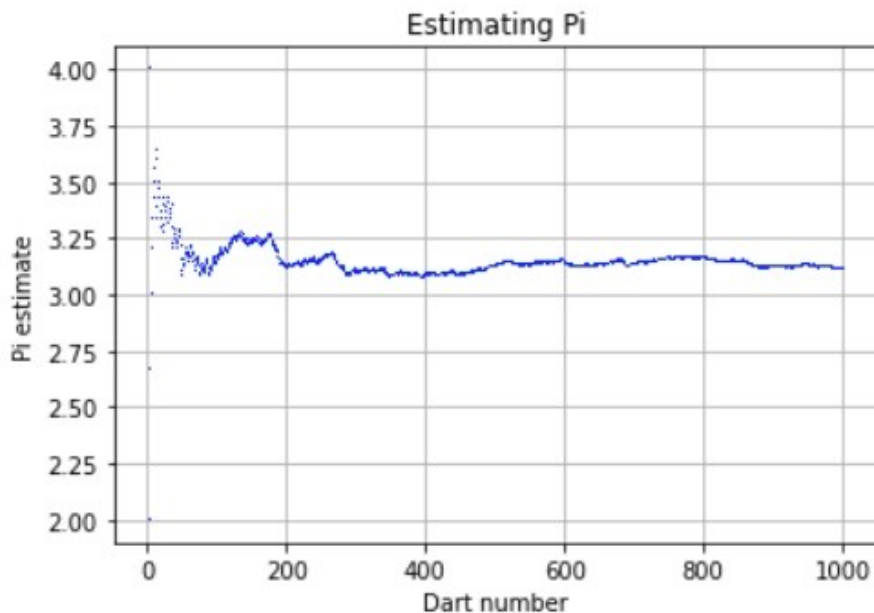
## PI + PYTHON: TASK

Estimate the value of Pi using the number of random (x, y) points (darts) that fall in the biggest circle that fits in a 200 x 200 square in the centre of the coordinate system.



Start by coding these components:

1. Generate 1000 (x, y) points with x and y being random numbers from -100 to 100.
2. Count the number of points that fall in the circle and the number of points that fall outside of the circle.
3. For each point calculate use this information to estimate the value of Pi
4. Plot all of the values of Pi, as shown below



Create a poster presentation of what you did, what you learned, and what else you'd like to know.

### HOW TO WORK AS A TEAM

1. A **non-competitive** atmosphere among team members and among teams
2. A **common purpose** within and across teams
3. **Collaborative** problem-solving, where everyone contributes
4. **Scaffolding** by the teacher as needed
5. **Everyone develops understanding**, with no team members left behind
6. **Exchange of ideas among teams**, with opportunities for cross-team visits
7. **Multiple solution methods**, modelling/solving problems in more than one way
8. **A culminating sharing** of what teams did, learned, and wonder about