

Year 1 Programming Club

my name:

Sarim Baig

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Usual time: Wednesday 12:00 PM – 02:00 PM

October 23, and October 30: 09:00AM – 10:00AM

Usual venue: 305 A/B

Who is the club for?

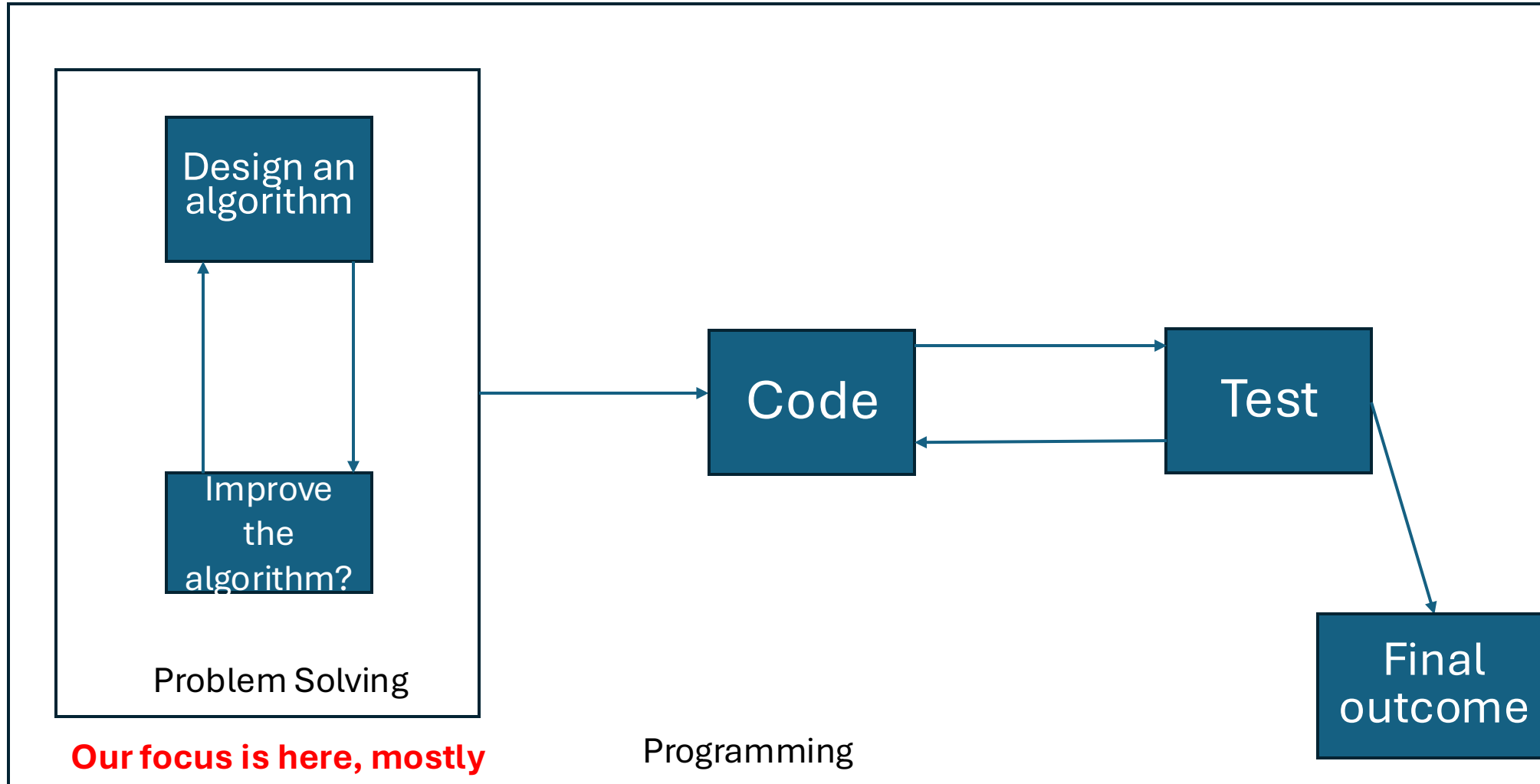
This is a new activity for **Year 1 students who:**

- have some background in programming
- would like to engage in more problem-solving and programming activities
- are particularly interested in the subject

The club is extra-curricular

- The club is not a substitute, and not a version, of the Programming for Engineers module
- I will not be teaching Programming in C++ (or any particular language)
- The activities will be mostly supported in Python, although they are in essence language-neutral
- There will be no assessments and no submissions
 - Your participation is based entirely on personal motivation and time constraints

The emphasis will be on problem-solving



What is in store?

If you choose to continue engaging with the club, we'll be creating:

- **Competition problems:** for example, ICPC regional and world competition problems...
- **Games:** for example, a graphical breakout game, a 2-player chess game with board state detection..
- **Simulations:** for example: game of life, simulating the spread of COVID-19, etc...
- **Data structures:** for example, binary heaps, trees, hash tables, etc...
- **Preliminaries of various areas of CS:** some basic techniques in ML, e.g. the perceptron, basic searching techniques in AI, e.g., a heuristic-based search method for a Sudoku solvers, etc...

Several of the projects will be sufficiently open-ended to allow self-driven exploration...

Access to the materials

Problems will be posted weekly at:

<https://sarimbaig01.github.io/proghack/>