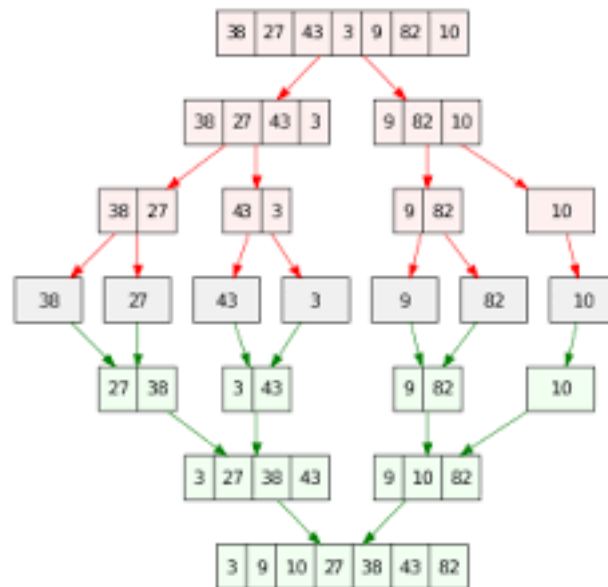# APCS Final Project: Visual Sorting

Aditya Pahuja, period 7

May 31, 2023

1 Description

The goal is to have a program that visualizes sorting algorithms: for example, one of the animations I would create would go through this process for merge sort.

2 Current Functionalities

- A `ListElement` class whose objects toggle between displaying `value` and displaying a bar whose length is related to `value`. (The displaying itself is not done yet)

- A `Sorter` class which will eventually do the sorting.

- An `Artist` class which is supposed to be a container for methods to draw things.

- Random array generation using `java.util.Collections`.

- Figured out how to draw the `ListElements` neatly.

- Bubble sort! (but animations are annoying)

3 Next Steps

- More sorting algorithms

- Animations

- User interaction

The animations in particular are really, really annoying because Processing updates the screen after method calls are all done, as opposed to during a method call.

4 UML Diagram