Assignment 3: FM synthesis

Description:

Create an instrument based on FM synthesis and an interface for controlling it.

For the synthesis part, feel free to check the examples on https://sccode.org and other resources online. In your project you can create any sound and combine any effect.

For playing your instrument you can either use a MIDI external device or implement a sequencing technique with SuperCollider.

Regarding the control part, implement a user interface where it is possible to control the synthesis parameters, e.g. carrier frequency, modulation index, modulation frequency, etc. The communication between the user interface and SuperCollider should use OSC communication protocol. For the user interface you can use Processing, JUCE or any other device (smartphone with OSC apps, Arduino, Kinect, …).

Be creative, feel free to combine different components for visualization, user interaction and control.

Output:

- a brief presentation and demonstration of your work (max 5 minutes) that will be given to the class
- a more detailed report in which you illustrate your system and its implementation (max 5 pages).
- a link to a repository containing the code (e.g. on GitHub) with minimal comments.