Workshop 1

Programming basics

Format

Eight tasks are described that need implementation using the SuperCollider language.

Students shall work in groups to solve at least some of the tasks during class.

The final 30 minutes of class should involve a short presentation of each group where they show or discuss what they have done.

If students complete all the tasks additional exercises can also be found at the end.

Tasks

Tasks 1

1. Implement a small program that takes a list of numbers as input and returns the smallest and largest of the numbers found in that list.

2. Implement a small calculator that takes as input two numbers to operate on and an indication of what mathematical operation to perform. Finally it should return the calculated value.

3. Write a program that maps a list of words into a number that is calculated by summing the length of each word.

4. Write a language filter that will take a sentence as input and remove all As and Es out of that phrase and return the output.

5. Write a printing program that will output a multiplication table for its input value (n * 1, n * 2 etc.)

6. Write a function that will return a list of pitches

Tasks 2

7. Write a program that takes two input numbers. Once the input has been provided it prints out all numbers in the range of the ones set as input.

8. Write a program to calculate the sum 1+2+3+... +300. Display the total after every 20 terms by using an if statement to check if the current number of terms is a multiple of 20.