English 442 Exercise Four
Shakespeare in Code: Sonnet Conversion
Part 4: Algorithms

The Aim   You've done various kinds of conversions of the same sonnet. Now, it's time to try building it from scratch! In this exercise, your task is to create a "program" (a set of instructions) that will build a version of the sonnet when it's executed.

In keeping with the "physical" objects we've been making up until now, let's add in an extra element: once you've created the program, write it down, and build a self-contained box that contains: 1) raw materials to build the sonnet, and 2) the instructions on note cards. Think of it like one of those self-contained craft kits, recipe boxes or Fluxus boxes.

Once the box is complete, you should be able to give it to someone else, and they should be able to build a version of the sonnet from the items in the box.

The Text   Sonnet #12 from Shakespeare:

01   When I do count the clock that tells the time,
02   And see the brave day sunk in hideous night;
03   When I behold the violet past prime,
04   And sable curls all silver'd o'er with white;
05   When lofty trees I see barren of leaves
06   Which erst from heat did canopy the herd,
07   And summer's green all girded up in sheaves
08   Borne on the bier with white and bristly beard,
09   Then of thy beauty do I question make,
10   That thou among the wastes of time must go,
11   Since sweets and beauties do themselves forsake
12   And die as fast as they see others grow;
13   And nothing 'gainst Time's scythe can make defence
14   Save breed, to brave him when he takes thee hence.

Task Step 1:   The "input" setup. All together:

- Reread the poem and look at how it's structured.
- Think about a basic program: it's a set of instructions that tell you how to make something happen; a kind of recipe that cooks with information instead of cake ☺. So, your task is to create a set of instructions or a "recipe" that will help a third party to "build" a sonnet from scratch.
- If you know anything about very basic programs, you'll know they have some interesting features. They're not just a list of instructions 1 > 2 > 3 etc. Instead, they are economical: if a task has to be repeated more than once, it's listed only once. Then, you use a "counter" to keep track of how many times the instruction has been executed. When the counter hits the right number, the program moves on to another task.
- Look at the parts of the poem that are patterned and/or repeat, and decide how you're going to write a set of instructions to build the sonnet.
- Hint: remember flow charts? They're great…
- Make a list of possible "ingredients" to build the sonnet.

Task Step 2:   Come up with the "output" solution yourselves, in pairs.

Next Week &
Following   Bring in all your materials and start writing your instruction cards and building your recipe box.