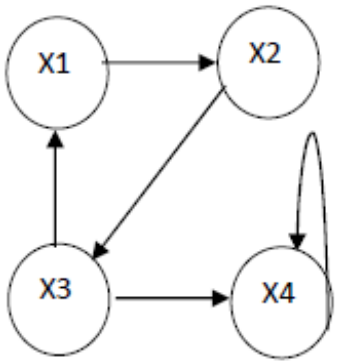
Formal Verification and Synthesis - אימות פורמלי וסינתזה

Exercise #2 – 27.10.2020

This assignment is about strongly connected components:
given a string (see example) which represents a graph of N nodes, write a code that will return SCC's.

example:
Input string:
"1 2,2 3,3 1,3 4,4 4"
The given string represents this graph: (every edge represented by source# and target#)



The output for this graph should be:
{x1,x2,x3}, {x4}
(the SCC's of this graph)
The group with the smallest index will be first and within the groups will also be printed by order (smallest to biggest index#).

Be sure to check edge cases!!

The code can be written in any language of your choice (python, Java, c++, c – if you would like to use a different language, send me an email first), but I will only accept a program that compiles and runs on my computer.

Should include instructions on how to run the program.

You can also share a github link instead of giving in the code (with readme).