CS200 - Programming Assignment 2

Please read the sections of the syllabus on programming assignments and honor code before starting this assignment.

Consider the graph formed by the prerequisite structure of computer science classes, where each CSCI class is a vertex in the graph, and we put an edge between two classes if one class is a prereq for the other. (Is the graph directed or undirected?)

Write a program in python or java that uses the data on the website CS Courses to first create an adjacency list representation of this graph. (The set of vertices should consist of all CSCI classes listed on the website.) Next, your program should run a graph search (of any type) on this graph, starting from CSCI 0101, and output a list of all of the CSCI classes that are reachable from this starting point. Finally, you should output a list of all of the classes that are not reachable from CSCI 0101.

You may use packages to help you access and parse the website, but you must write code to create the adjacency list and to perform graph search yourself. You should not hard-code the adjacency list, but should use code (with perhaps a few special cases) that goes through the website and automatically creates the list.

Put a multi-line comment at the beginning of your program. It should contain:

- Your name

- Programming Assignment 2

- The name of anyone you worked with

- The number of hours you spent on this assignment

- Output of your program