

Your task is to code up the Kasaraju's algorithm for computing strongly connected components (SCCs), and to run this algorithm on the given graph. The output is the sizes of five largest SCCs in decreasing order of sizes.

The input file contains the edges of a directed graph. Vertices are labeled as positive integers from 1 to 875714. Every row indicates an edge, the vertex label in first column is the tail and the vertex label in second column is the head (recall the graph is directed, and the edges are directed from the first column vertex to the second column vertex). So for example, the 11th row looks like : "2 47646". This just means that the vertex with label 2 has an outgoing edge to the vertex with label 47646