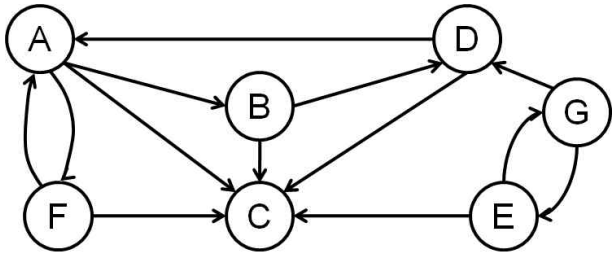
Algorithm Analysis Homework 6

Due by 5/29(Fri.) through hisnet

Write a program that compute transpose of a graph.

Input graph will be represented as matrix. For example, the following sample graph will be represented as follows.



	A	B	C	D	E	F	G
A	0	1	1	0	0	1	0
B	0	0	1	1	0	0	0
C	0	0	0	0	0	0	0
D	1	0	1	0	0	0	0
E	0	0	1	0	0	0	1
F	1	0	1	0	0	0	0
G	0	0	0	1	1	0	0

Assume number of nodes in your graph is less than or equal to 20. First, your program reads input file named 'hw6_data.txt' and construct *Adj* array and adjacency list in alphabetical order for a given input graph. Then compute transpose of the graph.

The program should print out followings.
1) Array of adjacency list of above graph
2) Array of adjacency list of transpose graph

Try to make your output as neat as possible, so that other person can see what you have done clearly. And you should use 'C' language for this and next homeworks as described in syllabus. Test your program with above example and several other graphs.