

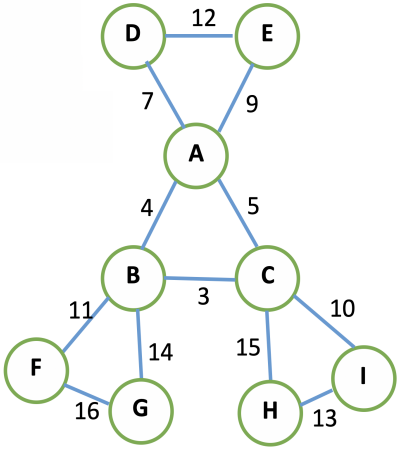
Distributed Systems

Computer Assignment 1 (Kompics)

Due: 8th of Azar, Midnight

Please upload your code and graphical notation design to the course webpage no later than Friday, 8th of Azar, midnight.

The GHS algorithm is used for finding the minimum spanning tree in a weighted graph. By considering all the assumptions for this algorithm, a graph will be given to you in a file with the following format:

File	Description	Graph
9 A-B,4 A-C,5 B-C,3 A-D,7 A-E,9 D-E,12 B-F,11 B-G,14 F-G,16 C-I,10 C-H,15 H-I,13	Number of nodes Edge, weight	

You need to read this input file, implement the GHS algorithm and then write the MST output in a file with the following format:

File	Description	Graph
A-B,4 B-C,3 A-D,7 A-E,9 B-F,11 B-G,14 C-I,10 H-I,13	Edge, weight	<pre> graph TD A --- 4 B B --- 3 C A --- 7 D A --- 9 E B --- 11 F B --- 14 G C --- 10 I H --- 13 I </pre>

Feel free to ask your questions by sending email to: iman.saberi@ut.ac.ir