

BIM304 - Computer Algorithm Design

Homework III

- ZIP file format: **YourNameAndSurname_HW2.zip**
- You have to upload your ZIP file until on **Sunday, June 13, 2021, until 11.59 to the MERGEN.**

Develop an application that calculates the Minimum Spanning Tree of a graph.

If the input is:

graph1.txt	Graph1
<pre> 14 0 1 4 0 7 8 1 7 11 7 8 7 7 6 1 1 2 8 8 2 2 8 6 6 6 5 2 2 5 4 2 3 7 3 4 9 3 5 14 5 4 10 </pre>	

then the output should be :

Your code output (Graph 1)	Graph 1 output
<pre> ***** Minimum Spanning Tree weight: 37 Edge List: 7 - 6 1 8 - 2 2 6 - 5 2 0 - 1 4 2 - 5 4 2 - 3 7 0 - 7 8 3 - 4 9 ***** </pre>	

Details

- There are 2 txt files. These files are in the ZIP file provided to you.
 1. graph_1.txt → it contains 14 edges
 2. graph_2.txt → it contains 20 edges
- The format of the data is as follows:
 1. The first element specify the number of edges in the graph
 2. Subsequent line contains the edge information.

Ex: 7 6 1 => 

- Grouping is not allowed in this homework. Please obey the ethical rules.
- You need to write the codes suitable for the methods left blank in the given java files. The files provided to you are:
 1. Subset.java → Do nothing
 2. Edge.java → Do nothing
 3. TestMST.java → Do nothing.
 4. **FindMST.java** → Write the required codes for the methods left blank. Never change the method names and descriptions.