# Don’t forget to set your Eclipse workspace and working set.

# You must submit the JAR file, exported (with source code), from your Eclipse project.

# You must check your JAR file to make sure all the source files (.java files) are present. It can be opened with file compression programs such as 7-zip or Winrar.

# Failure to export properly will result in your work not getting marked.

# To submit:

# Export your project to a JAR file, with source code.

# Name your JAR file ID\_Week15\_Q1.jar. For example, 6623110021\_Week15\_Q1.jar

# Submit the JAR file on MyCourseville.

## Constructing Huffman tree (15 marks, will be scaled to equal to other homeworks)

You are given the files:

* 1. Heap.java // code for Heap class
  2. HuffmanNode.java // code for building a Huffman tree
  3. testHuffman.java // test cases for your JUnit (3 marks for each test)

Write the following methods in class HuffmanNode (you are only allowed to modify this file, otherwise you get 0 mark):

(**You must not change existing methods or change any variable modifier (ie. Do not change private to public), otherwise you will get 0 mark**.)

* **public static HuffmanNode buildHuffmanTree(Heap h) throws Exception**

This method creates a Huffman tree from a given heap (using the method defined in the lecture). It returns the root node of the constructed Huffman tree.