# CSC 3100 : Data Structures and Algorithms

Programming Assignment 4

Due:23:59,25th Dec 2020

## 1 Problems

- You are required to solve two problems: Huffman Encoding and Dijkstra, each worth 50 points. To get full mark, your program needs to run correctly and efficiently.
- You may use Main.java in the compressed file for the data-input purpose.
- OJ link: https://oj.polarisstudio.cn/contest/csc3100fall2020a4huf

## 2 Submission

- Codes must be submitted on the BB along with lab report.
- You should register the website by the **any email**. Note that you MUST set username to your **student ID.** Otherwise your submission would not be identified.
- Later submission would overwrite the earlier ones, i.e., we take your very last submission only.

## 3 Grading

- Correctness and Efficiency[80%]
  - How much score get on OJ's contest.
    - There are 10 test points, pass one can gain 10 points.
    - The diÿculty of 10 points is from easy to hard.
- Report[20%]
  Your lab report needs to elaborate the following points:
  - What are the possible solutions for this problem?

- How do you solve this problem?
- How do you optimize your solution ?
- Why is your solution better than others? (Some test results can be included)
- How do you test your program? (local test, online judge test or something)
- What are the possible further improvements?

# 4 Report

- You should submit two files via blackboard. One is the source code file which is same with your Online Judge's code named "Main1_ID.java, Main2_ID.java"(two problems), where ID is your student number; and the other is the report named "AS4Report_ID.pdf" in PDF format, where ID is your student number.
- Please package two files in one archive file named "AS4Submission_ID", where ID is your student number.
- Please upload your submission to our online assignment drop box which has been created in our BB account under the directory of "content\\Assignment4 Submission" The submission is now open before the due.