CECS 424
Assignment 10
Total: 40 Points

General Instruction

- This is a group assignment.

- Submit uncompressed file(s) via BeachBoard (Not email or in class).

1. Translate your `Assn9.cpp` into `Java`, `Python`, and `JavaScript` and discuss the advantages and disadvantages of the languages.

   i. Form a group with up to 6 students.

   ii. You are asked to translate your `Assn9.cpp` into `Java`, `Python`, and `JavaScript` except the part "iv. Floating point number distribution".

   iii. Write `Assn10.java`, `Assn10.py` and `Assn10.js`.

   iv. You can use the 64-bit `IEEE 754` floating point number format.

   v. They can be same for all of the members, but submit the following **individually**.
       (a) (30 points) **source codes** and the screen shots of **console outputs** (you do not need to include a histogram)
       (b) (10 points) discussion report

   Expected output for the 32-bit `IEEE 754` floating point number format

   ```
   i. Floating point number converter.
   3.14159 -> (0,128,4788187)

   ii. Floating point number enumeration.
   1th number: 1.4013e-045
   2th number: 2.8026e-045
   3th number: 4.2039e-045
   4th number: 5.60519e-045
   5th number: 7.00649e-045
   6th number: 8.40779e-045
   7th number: 9.80909e-045
   8th number: 1.12104e-044
   9th number: 1.26117e-044
   10th number: 1.4013e-044

   iii. Floating point number counting
   Number of positive floating point numbers: 2139095039
   Number of floating point numbers between 0 and 1: 1065353216
   Proportion (# of 0~1) / (# of positive): 49.8039%
   ```