Genetic Algorithms HW #2 (5%)

Due: 2019/12/27

Implement an **ecGA model builder** with any programming language of your choice.

Instructions:

(a) Go to http://140.112.175.111:8888/ga_hw2.html.

(b) Type your student ID in the textbox and click "submit".
Download the population "popu000.txt".

(c) Execute your ecGA model builder.

(d) Upload the MPM and let the ecGA do its job.

(e) Download the population after selection. e.g., "popu006.txt" or "popu015.txt".

(f) Repeat steps (d) to (e) until you find the global optimum.
(The fitness of the global optimum is 100.)

(g) Pack (1) optimum.txt ("optimum.txt" containing 50 bits, you may copy & paste)
(2) all those models that you have submitted within a file
Name the files by "mpm(3-digit generation with leading zeros, starting from 000).txt",
e.g., "mpm006.txt" or "mpm025.txt".

(h) Upload the packed file to CEIBA by the due date.

The format of the model:

Each line represents a building block.

building_block_size first_gene second_gene ... last_gene

For example:

If the MPM is: [0-1-2] [3] [4-5]

The output should be:

3 0 1 2
1 3
2 4 5

Note:

- The index starts from 0.
- The order does not matter.