# Homework I

1. (10%) Implement the Erlang-B formula, and calculate the total offered traffic load for the following system parameters:
   - Channel number: 1~20, 200~220
   - Blocking rate: 1%, 3%, 5%, 10%
2. (10%) (a) Could it be possible that the total offered traffic load is larger than the number of available channels? Why?

   (b) How to determine the traffic that has been served?
3. (10%) Assume that there are 600 channels equally shared by 1) one, 2) two, or 3) three operators by using the frequency reuse factor $N = 5$.
   - Find the maximum offered traffic load per cell for the three cases with the blocking rate equal to 1%, 3%, 5%, or 10%
   - Which case (one, two, or three operators) is more efficient?

- 助教: EECS Room 605, TWNTHUCOM5170@gmail.com
- Due Date: 10/14 (You shall submit your paper report during the class. You shall also mail your program to the TA.)