**Programming Assignment 1**

**中央大學 106522042 陳履軒**

* Note

Though I write the description and analysis of the algorithm I am going to use for this assignment, I eventually don’t implement the algorithm. Sorry for the inconvenience.

* Description

The algorithm I use is *Greedy Tree-map*. The algorithm can be described as below:

1. Let be the fanin nodes of node and .
2. Packing the nodes with greedy method
   * Cover by , where is the largest index *s.t.* remains *K*-feasible.

* Analysis
  + Time complexity

Assume there are nodes and we want the circuit can be *K*-feasible, each node needs time to packing (need either *K* or *log n* time to pack, we hereby choose the larger one). In turn, the total time complexity is .