**The Input/Output Format and ILP Formulation for CG2NoC**

**Input format**

One line with four integers

lines with one super neuron per line

lines with one edge per line

**Output format**

lines with one super neuron per line

**Constants**

: the width of NoC (default: 8)

: the height of NoC (default: 8)

: capacity of a core (default: 1024)

: the coordinate of (default: (0, 0) to (7, 7))

: the number of neurons

: the number of edges between neurons

: latency of

: neurons in

: data transfer from to

: the position of

**Variables**

: if is mapped onto

: the time stamp when is finished

: auxiliary variables for the serial core constraint

: data transfer latency from to

**Minimize**

or

**Subject to**

(1) core capacity constraint:

(2) no copy constraint:

(3) serial core constraint ():

(4) data transfer constraint ():

(5) neuron order constraint: