## **Chandy-Lamport**

# Compile:

javac \*.java

### Run:

java Process PROCESS\_ID\_SNAP\_SHOT\_PROCESS\_ID\_TOTAL\_NO\_OF\_PROCESSES\_CHANNEL\_STATE\_BOOLEAN

## **Functionalities:**

MainClass is Process.java

Command line arguments process id ,snapshot id, number of processes and channel boolean(to measure channel state by adding a wait before sending marker).

Update the process Id, IPAddress and port in XML file.

# Marker sending and receiving rule followed as per Chandy-Lamport Snapshot algorithm.

In each process EventServer and ProcessClient will be running which receives and sends events,marker to all other processes.

Each process sends an event for every 1 seconds and takes a snapshot for every 2 seconds.

In process which initiates snapshot, Snapshot server will be running which receives snapshot from other processes and prints it.

In all other processes other than snapshot i d process, snapshot client will be running which sends snap of their current state and incoming channel states to the snapshot server.

#### All error cases are handled.

Amount will never go less in negative.

Snapshot algorithm will be started only after all processes are up and running. Snapshot will be printed only after snapshot server receives snap from all other running processes.

Correctness of snapshot can be verified by summing up the amount in each process.