Homework 4 Files Description Jorge Travieso

Update: Due to the large size of the test matrix (4096 x 4096) the matrices files have been uploaded to http://jorgetravieso.com/mpi/ directory.

1. cannon.c -- an implementation of Cannon's Paralle Matrix Multiplication
2. seqmm.c --- multiplies two matrices in a sequential way.
3. prtmat.c -- prints matrices
4. genmatc -- generates a random matrix of n x m dimensions
5. 4096.parallel folder – output using cannon algorithm
   - 4096.mtx -- input matrix of 4096x4096 dimension
   - mpijob.sub – job script (MPI with 16 processors)
   - 4096.out – output matrix of 4096.mtx multiplied by 4096.mtx
   - mpi_cannon_4096.16.out – jobscript output
6. 4096.parallel folder – output using sequential algorithm
   - seqjob.sub – job script (Sequential)
   - 4096.out – output matrix of 4096.mtx multiplied by 4096.mtx
   - mpi_cannon_4096.16.out – jobscript output
   - seqmm_4096.1.out – sequential jobscript output

Input Matrix	Cannon Time (s)	Sequential Time (s)
4096.mtx	232.62 sec.	352.24 sec.