MPI\_Barrier(MPI\_COMM\_WORLD); /\* Wait until every processor complete the initialization. \*/

Do nothing at this stage

Print final result

Timestamp>60

Integrate data from slave processors & Calculate total strikes

MPI\_Reduce(MPI\_SUM)

Calculate Initialization time & Setup timestamp

Generate random numbers & Integrate vessels’ location information to locationCount[]

Generate random numbers & Integrate vessels’ location information to locationCount[]

Generate random numbers & Integrate vessels’ location information to locationCount[]

Get number of vessels

Get number of vessels

Get number of vessels

Get number of vessels

Variable Declarations

MPI\_Init(&args, &argv)

MPI\_Comm\_rank(MPI\_COMM\_WORLD, &myId);

MPI\_Comm\_size(MPI\_COMM\_WORLD, &size);

srand(time(NULL) + myId);