1) How do I parallelize the serial implement?

Answer: I parallelize the progress of calculating the min distance node in the unknown items, and I also parallelize the progress of release the distance of the node, I parallelize the progress by divide these things into different process

2) Does my program work perfectly?

Answer: My program work perfectly in my test cases, and have no wrong results

3) What is the speed up comparing to the serial one?

Answer: if the test cases is small, I find that the speed up is not obvious, but when the test cases becomes bigger, the speedup is close to the p

4) How to run the program?

Answer:

mpicc –o hello mpi.c

mpirun –np (numbers of the processes) ./hello < (name of the file)