Compile Instructions

For each program to see the resulting graph and shortest path distance uncomment the 'Graphing Check' sections throughout the code.
For the OMP and Pthreads version the number of threads is set to 4, to change this navigate to line 50 and set the number of threads to what you would like.

Simple Dijkstra Sequential Version:

To compile the sequential version of Simple Dijkstra enter the directory 'Simple Dijkstra Sequential Version'.
Type the command: `gcc dijkstra.c Dijkstra_tools.c –o dijkstra –w`

To run the program you can choose the number of nodes you would like, I suggest using 10,000 nodes and choose the value 19 as the *srand()* value.
Type the command: `./dijkstra 10000 19`

Simple Dijkstra Parallel Version OMP:

To compile the OMP parallel version of Simple Dijkstra enter the directory 'Simple Dijkstra Parallel OMP Version'.
Type the command: `clang –fopenmp dijkstra_omp.c Dijkstra_tools.c –o dijkstra_omp –w`

To run the program you can choose the number of nodes you would like, I suggest using 10,000 nodes and choose the value 19 as the *srand()* value.
Type the command: `./dijkstra_omp 10000 19`

Simple Dijkstra Parallel Version Pthreads:

To compile the OMP parallel version of Simple Dijkstra enter the directory 'Simple Dijkstra Parallel Pthreads Version'.
Type the command: `gcc dijkstra_pthreads.c Dijkstra_tools.c –o dijkstra_pthreads –Wall –w –lpthread`

To run the program you can choose the number of nodes you would like, I suggest using 10,000 nodes and choose the value 19 as the *srand()* value.
Type the command: `./dijkstra_pthreads 10000 19`