1. Why is the overall distribution of points in the plot the way it is?

The points on the plot represent the number of nodes that need to be expanded depending on the algorithm used. We can see that as the path becomes larger more nodes need to be expanded. We can also see that as the path gets more complicated Dijkstra requires more nodes to expand as compared to Bi-HS.

1. Why some of the points are clearly below the main diagonal?

The diagonal line represents y=x. Therefore any points below the diagonal means that Bi-HS had to expand more nodes than Dijkstra’s. We can see that a few of the earlier points, that represent shorter paths, Bi-HS had to expand more nodes.

1. Why some of the points are clearly above the main diagonal?

As stated above, because the diagonal represents y=x, any points above the diagonal means that Dijkstra had to expand more nodes than Bi-HS. We can see that as the path gets farther Dijkstra very clearly had to expand many more nodes.