In the “average\_distance” function, when you pass double the number of steps for each walk, that average distance also increased along with it. This makes sense considering the more steps you take, the further from the starting point you make get to. There may be a fractional relation to the final average compared to steps, but none that I could determine.

In terms of final position and total distance traveled, final position simply represents the coordinates of the last position stored for a particular walk. Distance traveled however, represents how far the final position is compared to where the walk started (0,0). In this regard, these two statistics do represent completely different data in regards to walks/trials.

When executing my grid, the plot points ended up hugging the right side of the grid. As far as why this occurs there’s a couple things to keep in mind. First off, even though we’re using random numbers to generate these walks, using a seed ensures those random numbers are consistently the same. Therefore, the final output results end up the same. As far as why the final plot points may seem to favor one side of the grid over the other, I would say this is likely due to the limited radius of the grid. Any path position that lies beyond that radius will therefore not be shown in the grid. This visually produces the effect of the path “hugging” a particular side over another.