**RANDOM WALK PROBLEM**

The relationship between d, l and n is

d = distance

n = Number of steps

l = length of the step, here we are taking the l = 1 unit

Considered, steps from 1 to 50 and took 25 trails for number of steps.

Calculated the Average of the Distance from the 25 trails and plotted a graph.

With the graph, we can detect the relationship between d, l and n as,

d ~ l \* sqrt(n)

For a larger number of steps:

Let as take 8000 steps:

d ~ l \* Sqrt(n)

d ~ 1\* sqrt(8000)

d ~ 89.44

When I ran the program for 8000 steps:

d = 85.14

85.14 ~ 89.44



