

# Random Walk Problem

Aim:- To simulate random walk and plot the graph.

Theory:- For a particle which is at position  $n$  from origin after taking  $N$  steps,

$$P(n, N) = \frac{2}{\pi N} e^{-n^2/2N} \rightarrow \text{Probability of finding particle at } n \text{ after taking } N \text{ steps starting from origin}$$

## Result:

Visualization of results.dat (Two Runs)

