Activity # 3

(a)

Input	Average Distance
5	6.12290 1816
10	6.4045 2842
50	6.8909 4860
100	6.915421370
200	6.080 688122

(b)

As we can see above by increasing the number of step does effect the distance covered but we can not predict that it should be increasing or decreasing because their relationship is random.

RandomWalkAvg ( )

(c)

RandomWalkAvgManyTimes()

(d)

As number of simulation increases, we can see in graph, the points are more strck to the curve and not dispers or diverge from the actual position.