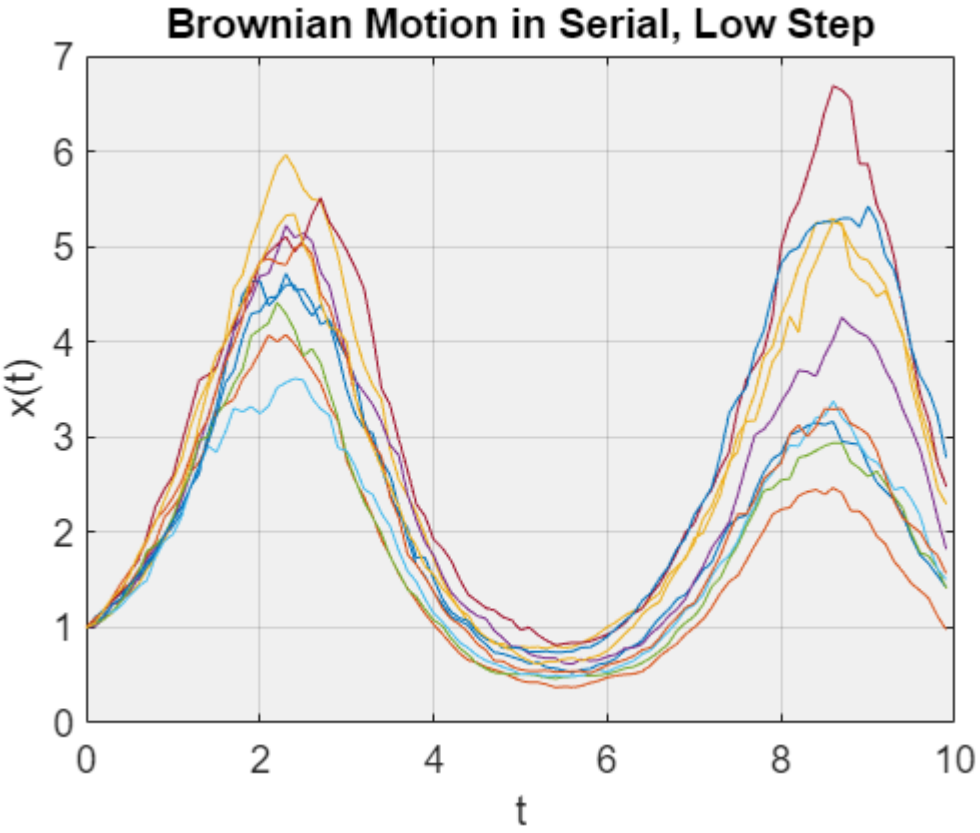
The plot below demonstrates the random outcomes produced by Brownian motion. This experiment was run in serial, and the plot is meant to provide a visualization of every run beginning at the same point then taking entirely different, random paths to their final value.

```
% Reads data from csv file
dataBig = readmatrix('sbrownianTen.csv');

% If I were to do this all again, I would
% write a for loop to make this process easier
t = dataBig(1:100,1);
x1 = dataBig(1:100,2);
x2 = dataBig(101:200,2);
x3 = dataBig(201:300,2);
x4 = dataBig(301:400,2);
x5 = dataBig(401:500,2);
x6 = dataBig(501:600,2);
x7 = dataBig(601:700,2);
x8 = dataBig(701:800,2);
x9 = dataBig(801:900,2);
x10 = dataBig(901:1000,2);

% Plot all 10 'x' vectors versus t
plot(t,x1,t,x2,t,x3,t,x4,t,x5,t,x6,t,x7,t,x8,t,x9,t,x10)

% Aesthetics
grid on
xlabel('t','FontSize',14);
ylabel('x(t)','FontSize',14);
set(gca,'FontSize',14);
set(gca,'color',1/255*[240 240 240])
title("Brownian Motion in Serial, Low Step")
```



Every color represents and individual run and all of it's recorded values. It can be observed that each run follows the same general pattern, with some proving to be more of an outlier than others. This experiment was run with a low step at N=100.