**Software Requirements for Random Walk Program**

**1:** Program must execute within a loop until user chooses to exit the loop.

**2:** All random walks must begin at point 0,0 on a scatter graph

**3:** Each step must be randomly set to left or right and forwards or backwards and to a random distance from 0 to 4

**3.1:** If the distance traveled for any step is zero, cancel the step.

**3.2:** If the distance traveled is not zero, plot a new point at the current location

**4:** The graph that displays the steps must be a scatter graph.

**4.1:** Scatter graph must have a dark background

**4.2:** Scatter points must be colored using the plasma colormap

**4.3:** The first and last points must be unique

**4.3.1:** The first point must be colored Chartreuse

**4.3.2:** The first point must have an edge colored fuchsia

**4.3.3:** The first point must be size 88

**4.3.4:** The final point must be colored deeppink

**4.3.5:** The final point must have an edge colored lavender

**4.3.6:** The final point must be size 120

**5:** The Axes must be removed from the graph.

**6:** the user must be prompted to enter y or n upon creating the graph.

**6.1:** If n is entered, exit the program.

**6.2:** If anything besides n is entered continue to loop through the program.