Due date: 20 February, 2024

1. For a given $L$, say $L=10$, in two dimensions, vary the value of $r_{c}$ from 0.2 to 1.0 and plot a graph showing the number of points generated, $N$, versus $r_{c}$. Explain the behavior of the graph analytically.

Note: You may use an external random number generator for generating uniform random variates.

