Part1a

Random 2D walk mobility Model Average distance: 32.070832
Random way point mobility Model Average distance: 25.229508

The nodes of the random 2D walk mobility Model move with random velocity and direction for either a fixed time or a fixed distance and will reflect when the node hit the boundary.
Thus, the spatial distribution of nodes should present a uniform distribution

The movement way of the random way point nodes is different from random walk mobility. Firstly, a node chooses a random destination point(known as a way point) and moves at a random speed from current locations to the way point. Secondly, after the node reaches a way point, the node waits for a time known as the pause time. Then repeat the above steps. In this situation, the node is more likely to go through the center part because the way point is chosen randomly.
Thus, the spatial distribution of nodes should not present a uniform distribution, but approximately Gaussian distribution.

Part1b

Random way point mobility Model Average distance: 30.427123

The node has a longer pause time and higher speeds will cause less time moving, which means the node is almost equally likely to appear in the central region and edge region. Thus, the concentration of nodes will appear lower than the part1a model, presenting a more uniform distribution.