Christian Schindelhauer   Freiburg, the 19th June, 2016
                                                          Discussion 22th June, 2016

Exercise for the lecture
Wireless Sensor Networks
Summer 2016
Sheet 8

EXERCISE 9:
Place 10 nodes randomly inside a square of edge size 3.

1. Compute the unit-disk graph.

2. Compute the minimum spanning tree.

3. Compute the convex hull of the node set.

4. Compute the relative neighbor-hood graph.

5. Compute the Delauney graph.

6. Compute the Gabriel graph.

7. Compute the corresponding grid graph for grid size $\frac{1}{2}$.

For all these example graphs compare the following terms:

1. Maximum edge length

2. Stretch factor

3. Number of edges

4. Edge length sum

Also solve the following questions.

1. Which of the graphs are planar?

2. In which of the above graphs a greedy geometric strategy always succeeds?