**GRAPH:**

{{0, 2, 0, 6, 0, 0},

{2, 0, 3, 8, 5, 0},

{0, 3, 0, 0, 7, 2},

{6, 8, 0, 0, 9, 1},

{0, 5, 7, 9, 0, 4},

{0, 0, 1, 2, 0, 0}};

**Console Output:**

Edge Weight

1-2 2

2-3 3

6-4 1

2-5 5

3-6 1

The following results is the MST. We have a couple things going on in the program. We have the Vertex 1 as the root node of the graph with a weight of zero. Prim’s algorithm will check the distance between all neighboring vertices from the root node, which is kept track of by a separate vector, marking the distance each with their respective weights. After it checks the neighboring vertices, Prim’s will then check and track the distance between the neighboring vertices of the neighboring vertices, with each of their weights stored. Once prims has run through, it will print the edges with their weights, creating the MST.