//Deliveries

//Source inputs:

Deliveries graph = new Deliveries(vertices);

graph.addOrder("one",0, 1, 4);

graph.addOrder("two",0, 2, 3);

graph.addOrder("three",0, 2, 1);

graph.addOrder("four",0, 3, 2);

graph.addOrder("five",0, 3, 4);

graph.addOrder("six",0, 4, 2);

graph.addOrder("seven",0, 5, 6);

graph.find\_Route(source\_vertex);

Deliveries graph2 = new Deliveries(vertices);

graph2.addOrder("five",0, 3, 4);

graph2.addOrder("six",0, 4, 2);

graph2.addOrder("seven",0, 5, 6);

graph2.addOrder("one",0, 1, 4);

graph2.addOrder("two",0, 2, 3);

graph2.addOrder("three",0, 2, 1);

graph2.addOrder("four",0, 3, 2);

graph2.find\_Route(source\_vertex);

//Console output from running the Deliveries tester:

**/\*outputs\*/**

**PQ: []**

**PQ set: [[6, 5, seven]]**

**PQ: [[6, 5, seven]]**

**PQ set: [[2, 4, six], [6, 5, seven]]**

**PQ: [[2, 4, six], [6, 5, seven]]**

**PQ set: [[2, 4, six], [6, 5, seven], [4, 3, five]]**

**PQ: [[2, 4, six], [6, 5, seven], [4, 3, five]]**

**PQ set: [[2, 4, six], [2, 3, four], [4, 3, five], [6, 5, seven]]**

**PQ: [[2, 4, six], [2, 3, four], [4, 3, five], [6, 5, seven]]**

**PQ set: [[1, 2, three], [2, 4, six], [4, 3, five], [6, 5, seven], [2, 3, four]]**

**PQ: [[1, 2, three], [2, 4, six], [4, 3, five], [6, 5, seven], [2, 3, four]]**

**PQ: [[1, 2, three], [2, 4, six], [4, 3, five], [6, 5, seven], [2, 3, four]]**

**PQ set: [[1, 2, three], [2, 4, six], [4, 3, five], [6, 5, seven], [2, 3, four], [4, 1, one]]**

**Dijkstra Algorithm: (Adjacency List + Priority Queue)**

**Distance from center to location: 1 distance: 0**

**Order Number: one Location: Edge [source=0, destination=1, weight=4]**

**one**

**4**

**Distance from center to location: 2 distance: 4**

**Order Number: two Location: Edge [source=0, destination=2, weight=3]**

**two**

**null**

**Distance from center to location: 3 distance: 1**

**Order Number: three Location: Edge [source=0, destination=2, weight=1]**

**three**

**1**

**Distance from center to location: 4 distance: 2**

**Order Number: four Location: Edge [source=0, destination=3, weight=2]**

**four**

**2**

**Distance from center to location: 5 distance: 2**

**Order Number: five Location: Edge [source=0, destination=3, weight=4]**

**five**

**4**

**Distance from center to location: 6 distance: 6**

**Order Number: six Location: Edge [source=0, destination=4, weight=2]**

**six**

**2**

**Distance from center to location: 7 distance: 2147483647**

**Order Number: seven Location: Edge [source=0, destination=5, weight=6]**

**seven**

**6**

**Order Sequence Vector:**

**[Order Number: three Location: Edge [source=0, destination=2, weight=1] , Order Number: six Location: Edge [source=0, destination=4, weight=2] , Order Number: four Location: Edge [source=0, destination=3, weight=2] , Order Number: five Location: Edge [source=0, destination=3, weight=4] , Order Number: one Location: Edge [source=0, destination=1, weight=4] , Order Number: seven Location: Edge [source=0, destination=5, weight=6] ]**

**//Missing “two”**

**PQ: []**

**PQ set: [[2, 3, four]]**

**PQ: [[2, 3, four]]**

**PQ set: [[1, 2, three], [2, 3, four]]**

**PQ: [[1, 2, three], [2, 3, four]]**

**PQ: [[1, 2, three], [2, 3, four]]**

**PQ set: [[1, 2, three], [2, 3, four], [4, 1, one]]**

**PQ: [[1, 2, three], [2, 3, four], [4, 1, one]]**

**PQ set: [[1, 2, three], [2, 3, four], [4, 1, one], [6, 5, seven]]**

**PQ: [[1, 2, three], [2, 3, four], [4, 1, one], [6, 5, seven]]**

**PQ set: [[1, 2, three], [2, 3, four], [4, 1, one], [6, 5, seven], [2, 4, six]]**

**PQ: [[1, 2, three], [2, 3, four], [4, 1, one], [6, 5, seven], [2, 4, six]]**

**Dijkstra Algorithm: (Adjacency List + Priority Queue)**

**Distance from center to location: 1 distance: 0**

**Order Number: five Location: Edge [source=0, destination=3, weight=4]**

**five**

**null**

**Distance from center to location: 2 distance: 4**

**Order Number: six Location: Edge [source=0, destination=4, weight=2]**

**six**

**2**

**Distance from center to location: 3 distance: 1**

**Order Number: seven Location: Edge [source=0, destination=5, weight=6]**

**seven**

**6**

**Distance from center to location: 4 distance: 2**

**Order Number: one Location: Edge [source=0, destination=1, weight=4]**

**one**

**4**

**Distance from center to location: 5 distance: 2**

**Order Number: two Location: Edge [source=0, destination=2, weight=3]**

**two**

**null**

**Distance from center to location: 6 distance: 6**

**Order Number: three Location: Edge [source=0, destination=2, weight=1]**

**three**

**1**

**Distance from center to location: 7 distance: 2147483647**

**Order Number: four Location: Edge [source=0, destination=3, weight=2]**

**four**

**2**

**Order Sequence Vector:**

**[Order Number: three Location: Edge [source=0, destination=2, weight=1] , Order Number: four Location: Edge [source=0, destination=3, weight=2] , Order Number: six Location: Edge [source=0, destination=4, weight=2] , Order Number: one Location: Edge [source=0, destination=1, weight=4] , Order Number: seven Location: Edge [source=0, destination=5, weight=6] ]**

**//Missing “two” and “five”**