```
1  public class SSSP {
2    static Map<Integer, List<Integer>> graph;
3    static Map<Integer, Double> distances;
4    static final Integer N = ...;
5    static final Double EPSILON = ...;
6    public static void main(String[] args) {
7      graph = makeGraph(N);
8      distances = new TreeMap();
9      Map<Integer, Double> newDistances = new TreeMap<>();
10     newDistances.put(0, 0.0);
11     for (int i = 1; i < N; i++) {
12       newDistances.put(i, Double.MAX_VALUE);
13     }
14     MapReduce<Integer, Integer, Double, Double> mapReduce
15             = new MapReduce<>();
16     mapReduce.setMapperSupplier(SSSP.Mapper::new);
17     mapReduce.setReducerSupplier(SSSP.Reducer::new);
18     boolean done = false;
19     while (!done) {
20       distances.putAll(newDistances);
21       mapReduce.setInput(
22               listOfFiniteDistanceNodes(distances)
23       );
24       newDistances.putAll(mapReduce.call());
25       done = withinEpsilon(distances, newDistances);
26     }
27     displayOutput(distances);
28   }
29 }
```

FIGURE 17.18 The SSSP class used in Exercise 17.5.