

```

1  public static void main(String[] args) {
2      points = readFile("cluster.dat");
3      centers = randomDistinctCenters(points);
4      pool = new ForkJoinPool();
5      double convergence = 1.0;
6      while (convergence > EPSILON) {
7          Splitter<Point> pointSplit = points
8              .stream()
9              .splitter();
10         RecursiveClusterTask clusterTask = new RecursiveClusterTask(pointSplit);
11         Map<Integer, Set<Point>> clusters = pool.invoke(clusterTask);
12         Splitter<Map.Entry<Integer, Set<Point>>> centerSplit = clusters
13             .entrySet()
14             .stream()
15             .splitter();
16         RecursiveCenterTask centerTask = new RecursiveCenterTask(centerSplit);
17         Map<Integer, Point> newCenters = pool.invoke(centerTask);
18         convergence = distance(centers, newCenters);
19         centers = newCenters;
20     }
21     displayOutput(centers);
22 }

```

FIGURE 17.19 Code for Exercise 17.13.