

```
1 public class Layer {
2     int width;
3     Balancer[] layer;
4     public Layer(int width) {
5         this.width = width;
6         layer = new Balancer[width];
7         for (int i = 0; i < width / 2; i++) {
8             layer[i] = layer[width-i-1] = new Balancer();
9         }
10    }
11    public int traverse(int input) {
12        int toggle = layer[input].traverse();
13        int hi, lo;
14        if (input < width / 2) {
15            lo = input;
16            hi = width - input - 1;
17        } else {
18            lo = width - input - 1;
19            hi = input;
20        }
21        if (toggle == 0) {
22            return lo;
23        } else {
24            return hi;
25        }
26    }
27 }
```

FIGURE 12.20 The Layer network.