Cricket.java

```
2 public class Cricket extends Vertex {
 3
 4 //
      private boolean[] chirp = new boolean[3];
 5
      private boolean[] chirp = new boolean[2];
 6
      private boolean willChirp;
 7
      private int currentTick = 0;
 8
      private final CricketObserver observer;
 9
10
      public Cricket(int n, CricketObserver o) {
11
          super(n);
12
          this.observer = o;
13
      }
14
15
      public void forceChirp() {
16
          willChirp = chirp[0] = true;
17
      }
18
19
      public void emitChirp() {
20
          if(willChirp) {
21
               willChirp = false;
22
               int n = super.degree();
23
               for(int i = 0; i < n; i++) {
24
                   edges.get(i).other(this).hearChirp();
25
               }
26
               observer.reportChirp(currentTick, super.n);
27
          }
28
      }
29
30
      private void hearChirp() {
31
          chirp[1] = true;
32
      }
33
34
      public void timeTick(int tick) {
35
          currentTick = tick;
36
          willChirp = chirp[0];
37
          chirp[0] = chirp[1];
38 //
          chirp[1] = chirp[2];
39 //
          chirp[2] = false;
40
          chirp[1] = false;
41
      }
```

Cricket.java

```
42
      public boolean directFlight(Cricket other) {
43
          boolean retval = false;
44
45
          if(equals(other)) return true;
          int e = super.degree();
46
47
          Cricket o;
          for(int i = 0; i < e && !retval; i++) {</pre>
48
               o = super.edges.get(i).other(this);
49
               retval = o.equals(other);
50
51
52
          return retval;
      }
53
54
      public boolean equals(Object o) {
55
          if( !(o instanceof Cricket)) {
56
               return false;
57
58
          if(0 == this) {
59
60
               return true;
61
          Cricket casted = (Cricket) o;
62
63
          return casted.n == this.n;
64
65
      }
66 }
67
```