

```

1 package club.westcs.OldMrYoung;
2
3 import java.util.ArrayList;
4 import java.util.Random;
5
6 public class Farm {
7     //Attributes
8     private Random rand;
9     private ArrayList<Animal> animals, song;
10
11     //Constructor
12     public Farm() {
13         rand = new Random();
14         animals = new ArrayList<>();
15         song = new ArrayList<>();
16         addAnimals();
17         makeSong();
18     }
19
20     //Methods
21     public void addAnimals() {
22         this.animals.add(new Pig());
23         this.animals.add(new Horse());
24         this.animals.add(new Cow());
25         this.animals.add(new Sheep());
26         this.animals.add(new Chicken());
27         this.animals.add(new Duck());
28         this.animals.add(new Goat());
29         this.animals.add(new Ox());
30         this.animals.add(new Goose());
31         this.animals.add(new Fox());
32     }
33
34     public void makeSong() {
35         for(int i = 1; animals.size() > 0; i++) {
36             int index = rand.nextInt(animals.size());
37             Animal temp = animals.remove(index);
38             temp.setNumber(i);
39             song.add(temp);
40         }
41     }
42
43     public void runSong() {
44         while(song.size() > 0) {
45             Animal singer = song.remove(song.size()-1);
46             singer.runSong();
47         }
48     }
49
50 }
51

```