

TestEdible.java

```
1 public class TestEdible {
2 public static void main(String[] args) {
3 Object[] objects = {new Tiger(), new Chicken(), new
Apple()};
4 for (int i = 0; i < objects.length; i++) {
5 if (objects[i] instanceof Edible)
6 System.out.println(((Edible)objects[i]).howToEat());
7
8 if (objects[i] instanceof Animal) {
9 System.out.println(((Animal)objects[i]).sound());
10 }
11 }
12 }
13 }

14
15 abstract class Animal {
16 /** Return animal sound */
17 public abstract String sound();
18 }
19
20 class Chicken extends Animal implements Edible {
21 @Override
22 public String howToEat() {
23 return "Chicken: Fry it";
24 }
25
26 @Override
```

```
27 public String sound() {
28     return "Chicken: cock-a-doodle-doo";
29 }
30 }
31
32 class Tiger extends Animal {
33     @Override
34     public String sound() {
35         return "Tiger: RROOAARR";
36     }
37 }
38
39 abstract class Fruit implements Edible {
40     // Data fields, constructors, and methods omitted here
41 }
42
43 class Apple extends Fruit {
44     @Override
45     public String howToEat() {
46         return "Apple: Make apple cider";
47     }
48 }
49
50 class Orange extends Fruit {
51     @Override
52     public String howToEat() {
53         return "Orange: Make orange juice";
54     }
55 }
```