

```
1  import java.util.ArrayList;
2  import java.util.Scanner;
3  import java.util.Iterator;
4
5  public class petlist{
6      ArrayList<Pet> mainList;
7      Iterator<Pet> it;
8      Scanner get;
9
10     public petlist(){
11         mainList = new ArrayList<Pet>();
12     }
13
14     public void addDog(){
15         get = new Scanner(System.in);
16
17         System.out.printf("please enter it's name :");
18         String name=get.nextLine();
19         System.out.printf("please enter it's weight :");
20         float weight=get.nextFloat();
21         mainList.add(new Dog(name,weight));
22     }
23
24     public void removeDog(){
25         get = new Scanner(System.in);
26         it = mainList.listIterator();
27
28         System.out.printf("please enter it's name :");
29         String name = get.nextLine();
30
31         while(it.hasNext()){
32             Pet temp = it.next();
33             if(temp.getName().equals(name)){
34                 if(temp instanceof Dog){
35                     it.remove();
36                     System.out.println("Removed !!");
37                 }
38             }
39         }
40     }
41
42     public void listDogs(){
43         for (Pet mainList : this.mainList){
44             if(mainList instanceof Dog)
45                 System.out.println(""+mainList.toString());
46         }
47     }
48
49     public void addCat(){
50         get = new Scanner(System.in);
51
52         System.out.printf("please enter it's name :");
53         String name=get.nextLine();
54         System.out.printf("please enter it's coat color :");
55         String coatColor=get.nextLine();
56         mainList.add(new Cat(name,coatColor));
57     }
58
59     public void removeCat(){
60         get = new Scanner(System.in);
```

```
61         it = mainList.listIterator();
62
63         System.out.printf("please enter it's name :");
64         String name=get.nextLine();
65
66         while(it.hasNext()) {
67             Pet temp = it.next();
68             if(temp.getName().equals(name)){
69                 if(temp instanceof Cat){
70                     it.remove();
71                     System.out.println("Removed !!");
72                 }
73             }
74         }
75     }
76
77     public void listCats(){
78         for(Pet mainList : this.mainList) {
79             if(mainList instanceof Cat)
80                 System.out.println(""+mainList.toString());
81         }
82     }
83
84     public void listAll() {
85         int i=1;
86         for (Pet mainList : this.mainList){
87             System.out.println(i+"-"+mainList.toString());
88             i++;
89         }
90     }
91
92     public void dogWeightInf() {
93
94         int counter = 0;
95         float minimum=999,maximum=0,avarage=0,total=0;
96         it = mainList.listIterator();
97
98         while(it.hasNext()){
99             Pet temp = it.next();
100             if (temp instanceof Dog){
101                 counter++;
102                 if( ((Dog)temp).getWeight() > maximum )
103                     maximum = ((Dog)temp).getWeight();
104                 if( ((Dog)temp).getWeight() < minimum )
105                     minimum = ((Dog)temp).getWeight();
106
107                 total += ((Dog)temp).getWeight();
108                 avarage = total / counter;
109             }
110         }
111         System.out.printf("Maximum weight = %.2f  Minimum weight = %.2f  Avarage
weight = %.2f\n",+maximum,+minimum,+avarage);
112     }
113 }
114
115
```