

```
1: // J.J. Collins
2: // CS4125 / CS4135 / CS5721
3:
4: // Name: progl_c-interfaces.java
5: // Intent: (a) move towards a realisation of the importance of "Program to
    Interfaces, NOT Implementation"
6: //          (b) a person has an address
7: // Note: replaces inheritance with association.
8: // While efficient (invocation in lines 44 and 44), not safe
9: // because of public visibility for attribute a in class person
10:
11: import java.util.*;
12:
13: /*****
14: class address
15: {
16:     // attributes
17:     private int tel;
18:
19:     // operations / methods
20:     public void set_tel_no(int number) {tel = number;}
21:     public void display_tel_no() { System.out.println(" Telephone number is: " + tel)
        ;}
22: };
23: *****/
24: // model association with an attribute, a person has an address
25:
26: class person
27: {
28:     public address a = new address();
29:     private int dob;
30:     public void set_dob(int date) { dob = date;}
31:     public void display_dob() { System.out.println(" Date of birth is: " + dob);}
32: }
33: /*****
34: class client {
35:
36:     public static void main(String args[]) {
37:
38:         person p = new person();
39:
40:         // invoke some operations on p
41:         p.a.set_tel_no(12345);
42:         p.set_dob(121212);
43:         p.a.display_tel_no();
44:         p.display_dob();
45:
46:     }
47: }
48: *****/
49:
```