```
 1: // J.J. Collins
 2: // CS4125 / CS4135 / CS5721
 3:
 4: // Name: prog1_e-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: introduces interface I_Addres, with the type of attribute a in line 31
 8: //        being I_Address i.e. a's permissible behaviour is specified by I_Address
 9: //        Take note of line 40 and 41.
10:
11: import java.util.*;
12: /********************************************************/
13: interface I_Address
14: {
15:    public void set_tel_no(int number);
16:    public void display_tel_no();
17: }
18: /********************************************************/
19: class address implements I_Address
20: {
21:    // attributes
22:    private int tel;
23:
24:    // operations / methods
25:    public void set_tel_no(int number) {tel = number;}
26:    public void display_tel_no() { System.out.println(" Telephone number is: " + tel)
         ;}
27:    public void try_call_me() {System.out.println(" You got me!");}
28: }
29: /********************************************************/
30: class person
31: {
32:     // attributes
33:     private int dob;
34:     // NOTE TYPE OF attribute a
35:     private I_Address a = new address();
36:
37:     public void set_tel(int t) { a.set_tel_no(t); }
38:     public void display_tel() {a.display_tel_no();}
39:     public void set_dob(int date) { dob = date;}
40:     public void display_dob() { System.out.println(" Date of birth is: " +  dob);}
41:
42:     // The following would generate an error if uncommented
43:     // public void test_a_behaviour() { a.try_call_me;}
44: }
45: /********************************************************/
46: class client {
47:
48:    public static void main(String args[]) {
49:
50:      person p = new person();
51:
52:      p.set_tel(12345);
53:      p.set_dob(121212);
54:      p.display_tel();
55:      p.display_dob();
56:    }
57: }
58: /********************************************************/
59:
```