```
1: // J.J. Collins,
2: // CS4125 / CS4135 / CS5721
3: // Name: prog2-dependency_injection.java
4: // Intent: example of dependency injection
5:
6: import java.util.*;
                  7: /****
8: interface I_Address
9: {
10:
    public void set_tel_no(int number);
11:
    public void display_tel_no();
12: }
14: class address implements I_Address
15: {
16:
    private int tel;
17:
18:
   public void set_tel_no(int number) {tel = number;}
    public void display_tel_no() { System.out.println(" Telephone number is: " + tel)
19:
    public void try_call_me() {System.out.println(" You got me!");}
20:
21: }
23: interface I_Person
24: {
25:
      public void set_address(I_Address ref);
26:
      public void set_tel(int t);
27:
      public void display_tel();
28:
      public void set_dob(int date);
29:
      public void display_dob();
30: }
32: class person implements I Person
33: {
34:
      // attributes
35:
      private I_Address a = null;
36:
      private int dob;
37:
38:
      // operations
39:
      public void set_address(I_Address ref) { a = ref;}
40:
      public void set_tel(int t) { a.set_tel_no(t); }
41:
      public void display_tel() {a.display_tel_no();}
      public void set_dob(int date) { dob = date;}
42:
43:
      public void display_dob() { System.out.println(" Date of birth is: " + dob);}
44: }
46: class container {
47:
    public static void main(String args[]) {
48:
49:
      \ensuremath{//} create p, an object that is an instance of class person
50:
51:
      I Address a = new address();
      I_Person p = new person();
52:
53:
      p.set_address(a); // dependency injection
54:
55:
      // invoke some operations on p
56:
     p.set_tel(12345);
      p.set_dob(121212);
57:
58:
      p.display_tel();
59:
      p.display_dob();
60:
61: }
63:
```

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