1 **import** javax.swing.JOptionPane;

2

3 **public** **class** MethodsAndParms

4 { **static int** a = 10; **// Two class level variables**

5 **static int** b;

6

7 **public static void** main(String[] args)

8 {

9 **int** desiredAge, first, second, difference; **// local Variables**

10

11 desiredAge = inputInteger("You are " + a + " years old" +

12 "\nHow old do you wish you were?");

13 difference = dif(desiredAge, a);

14 JOptionPane.showMessageDialog(null, + difference +

15 " Years to go");

16

17 first = inputInteger("Enter the first number to swap");

18 second = inputInteger("Enter the second number to swap");

19 swapParameters(first, second);

20 JOptionPane.showMessageDialog(null, "Swap using parameters: " +

21 first + " " + second);

22

23 a = inputInteger("Enter the first number to swap");

24 b = inputInteger("Enter the second number to swap");

25 swapClassLevels();

26 JOptionPane.showMessageDialog(null, "Swap using class levels: " +

27 a + " " + b);

28 }

29

30 **static int** inputInteger(String prompt)

31 {

32 int a; **// a local variable**

33 String sInput = JOptionPane.showInputDialog(prompt);

34 a = Integer.parseInt(sInput);

35 **return** a;

36 }

37

38 **static** **int** dif(**int** desiredAge, **int** a)

39 {

40 return desiredAge - a;

41 }

42

43 **static** **void** swapParameters(**int** a, **int** b)

44 {

45 **int** temp = a;

46 a = b;

47 b = temp;

48 }

49

50 **static** **void** swapClassLevels()

51 {

52 **int** temp = a;

53 a = b;

54 b = temp;

55 }

56 }

**Figure 3.5 The application MethodsAndParameters.**