Processing steps for the pretest loop example in Figure 6-6

1. The computer creates the number variable and initializes it to 1.
2. The computer processes the Do clause, which checks whether the number variable's value is less than or equal to 3. It is.
3. The MessageBox.Show method displays 1 (the contents of the number variable).
4. The number += 1 statement adds 1 to the contents of the number variable, giving 2.
5. The computer processes the Loop clause, which returns processing to the Do clause (the beginning of the loop).
6. The computer processes the Do clause, which checks whether the number variable's value is less than or equal to 3. It is.
7. The MessageBox.Show method displays 2 (the contents of the number variable).
8. The number += 1 statement adds 1 to the contents of the number variable, giving 3.
9. The computer processes the Loop clause, which returns processing to the Do clause.
10. The computer processes the Do clause, which checks whether the number variable's value is less than or equal to 3. It is.
11. The MessageBox.Show method displays 3 (the contents of the number variable).
12. The number += 1 statement adds 1 to the contents of the number variable, giving 4.
13. The computer processes the Loop clause, which returns processing to the Do clause.
14. The computer processes the Do clause, which checks whether the number variable's value is less than or equal to 3. It isn't, so the computer stops processing the Do…Loop statement. Processing continues with the statement following the Loop clause.

Processing steps for the posttest loop example in Figure 6-6

1. The computer creates the number variable and initializes it to 1.
2. The computer processes the Do clause, which marks the beginning of the loop.
3. The MessageBox.Show method displays 1 (the contents of the number variable).
4. The number += 1 statement adds 1 to the contents of the number variable, giving 2.
5. The computer processes the Loop clause, which checks whether the number variable's value is greater than 3. It isn't, so processing returns to the Do clause (the beginning of the loop).
6. The MessageBox.Show method displays 2 (the contents of the number variable).
7. The number += 1 statement adds 1 to the contents of the number variable, giving 3.
8. The computer processes the Loop clause, which checks whether the number variable's value is greater than 3. It isn't, so processing returns to the Do clause.
9. The MessageBox.Show method displays 3 (the contents of the number variable).
10. The number += 1 statement adds 1 to the contents of the number variable, giving 4.
11. The computer processes the Loop clause, which checks whether the number variable's value is greater than 3. It is, so the computer stops processing the Do…Loop statement. Processing continues with the statement following the Loop clause.