Key point: An assignment statement designates a value for a variable. An assignment statement can be used as an expression in Java.

2.6 Assignment Statements and Assignment Expressions

- In Java the equal sign (=) is the assignment operator.
  
  variable = expression;

- An expression represents a computation involving values, variables, and operators that taking them together, evaluates to a value.

  Examples:
  
  ```java
  int y = 1;        //Assign 1 to the variable y
  double radius = 1.0;      //Assign 1.0 to the variable radius
  int x = 5 * (3 / 2);      //Assign the value of the expression to x
  x = y + 1;        //Assign the addition of y and 1 to x
  double area = radius * radius * 3.14159; //Compute area
  ```

- A variable can appear on both sides of the assignment operator.
  
  x = x + 1;

- Wrong.
  
  1 = x;   //Wrong

- When an assignment is used as an expression, the value assigned is the value of the expression.

  ```java
  System.out.println(x = 1);
  ```

  is equivalent to

  ```java
  x = 1;
  System.out.println(x);
  ```

- When an expression or value is assigned to multiple variables, the statement is evaluated from right to left.

  ```java
  i = j = k = 1;
  ```

  is equivalent to

  ```java
  k = 1;
  j = k;
  i = j;
  ```