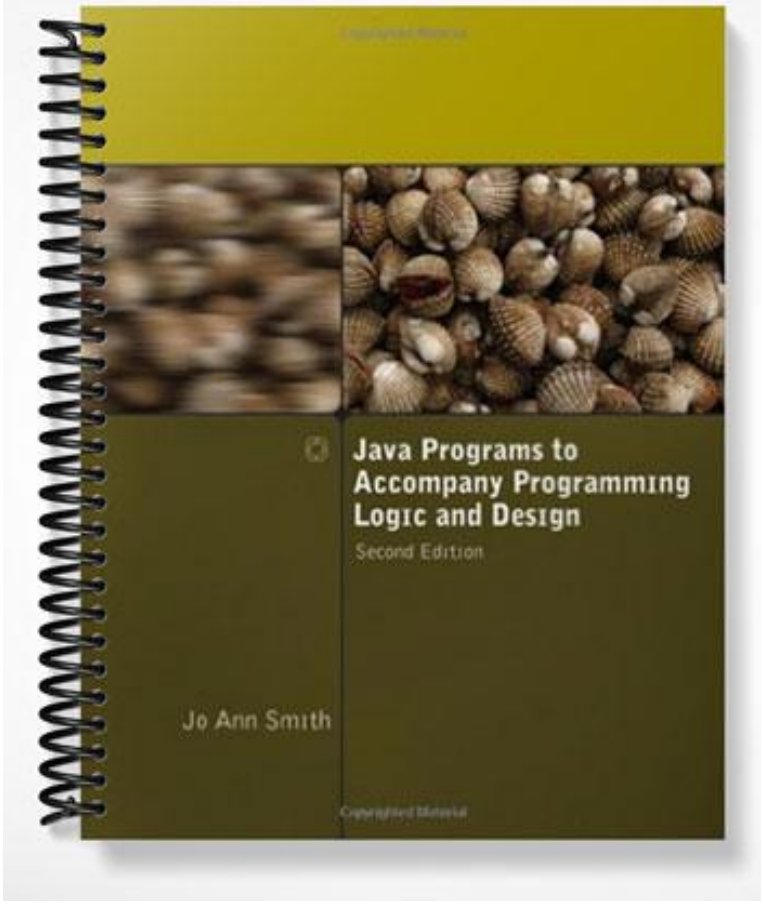
SOLUTIONS MANUAL



Java PAL, Third Edition
Chapter 2
Answers to the Exercise Questions

Exercise 2-1

1. `myAge` Yes `this_is_a_variable` Yes `NUMBER` Yes
   `yourAge` Yes `number` Yes `$number` Yes
   `float` No `1number` No `intNum` Yes
   `May25` Yes `number Two` No `Number` Yes

2. `double`
   `double`
   `String`
   `double`
   `int`

Exercise 2-2

1. ```
   int productNumber;
   int numPets;
   double bootPrice;
   String favBook;
   ```

2. ```
   double rectangleSide = 5.1;
   int daysInNovember = 30;
   String myDogName = "Duchess";
   int numCredits = 15;
   ```
   (This answer can vary depending on the number of classes.)

Exercise 2-3

1. ```
   final double CAR_WASH_PRICE = 14.95;
   final int DAYS_IN_NOVEMBER = 30;
   final String MY_DOG_NAME = "Duchess";
   final int MAX_CREDIT_HOURS = 18;
   ```

Exercise 2-4
   ```

1. The value of `answer1` is 27.
   The value of `answer2` is 104.
   The value of `answer3` is -1.
   The value of `answer4` is -1.
   The value of `answer5` is 30.
   The value of `answer6` is 5.

Precedence and associativity affect the order in which the operations are carried out thereby affecting the result.

Exercise 2-5

1. Change the declaration to `double width1 = 18.5;`
2. Change the declaration to `double numGallons;`
3. Change the order of the two assignment statements as follows:
   ```
   squareFeet = (width1 * height1 + width2 * height2) * 2;
   numGallons = squareFeet / 150;
   ```
4. No, both variables are not needed because the height of the walls is the same.
   Make the following changes:
   Delete the second height variable (`height2`)
   Change the square feet calculation statement to the following:
   ```
   squareFeet = (width1 * height1 + width2 * height1) * 2;
   ```