

Solutions to Quick Check Questions

2

Java Programming Basics

2.1 The First Java Program

1. Which of the following are invalid identifiers?
 - a. one
 - b. "Good-Bye"
 - c. 1234
 - d. DecafeLattePlease
 - e. \$hello\$
 - f. JAVA
 - g. hello,there
 - h. acct122
 - i. 4you
 - j. _doWork
 - k. Wait_For_Me

Invalid ones are crossed out. The reasons are as follows:

- b - no quote is allowed*
- c - the first character cannot be a digit*
- g - no comma is allowed*
- i - the first character cannot be a digit*

2. What's wrong with the following code?

```
JFrame myWindow();
```

```
myWindow.setVisible(true);
```

JFrame object myWindow is not created. The syntax for the object declaration is wrong.

3. Is there anything wrong with the following declarations?

```
mainWindow      MainWindow;  
Account, Customer  account, customer;
```

The correct syntax is a class name followed by object names. In the first declaration, if we assume the Java naming convention was followed, then the object name came first. It should be in reverse as

```
MainWindow  mainWindow;
```

In the second declaration, two class names were listed. It can only have one. The correct version is

```
Account      account;  
Customer     customer;
```

4. Which of the following statements is valid?

- a. `mainWindow.setVisible("true");`
- b. `mainWindow.setVisible(true);`

b

2.2 Program Components

No Quick Check questions.

2.3 Edit–Compile–Run Cycle

No Quick Check Questions.

2.4 Sample Java Standard Classes

2.4.1 JOptionPane for Output

1. Write Java statements to display the text I Love Java in the console window.

```
System.out.println("I Love Java");
```

2. Write statements to display the following shopping list in the console window. Don't forget to include blank spaces so the item names appear indented.

```
Shopping List:
    Apple
    Banana
    Lowfat Milk
```

```
System.out.println("Shopping List:\n" +
    "    Apple\n" +
    "    Banana\n" +
    "    LowFat Milk");
```

2.4.2 String

1. What will be the value of mystery when the following code is executed?

```
String text, mystery;

text    = "mocha chai latte";
mystery = text.substring(1,5);
```

Answer:

ocha

2. What will be displayed on the message dialog when the following code is executed?

```
String text = "I, Claudius";

System.out.println(text.indexOf("I") );
```

Answer:

0

3. What will be displayed on the message dialog when the following code is executed?

```
String text = "Augustus";  
  
System.out.println(text.length());
```

Answer:

8

4. What will be the value of text3 when the following code is executed?

```
String text1 = "a" + "b";  
String text2 = "c";  
  
String text3 = text1 + text2 + text1;
```

Answer:

"abcab"

2.4.3 Date and SimpleDateFormat

1. Write a code fragment to display today's date in the 07-04-2008 format.

```
SimpleDateFormat sdf;  
Date today;  
  
sdf = new SimpleDateFormat("MM-dd-yyy");  
today = new Date();  
  
System.out.println("Today is " + sdf.format(today));
```

2. What will be displayed on the message dialog when the following code is executed if today is July 4, 1776?

```

Date          today;
SimpleDateFormat sdf;

today = new Date( );
sdf    = new SimpleDateFormat("MMM dd, yyyy");

System.out.println("Today is " + sdf.format(today));

```

Answer:

Today is Jul 04, 1776

2.4.4 Standard Input

1. Write a code to input the last name of a user.

```

Scanner scanner = new Scanner(System.in);
String name;

System.out.println("Enter your middle initial");
name = scanner.next();

```

2. Show the content of the console window when the following code is executed and the text Barbaro is entered:

```

Scanner scanner = new Scanner(System.in);
String winner;
System.out.print(
    "Enter the name of the derby winner: ");
winner = scanner.next( );
System.out.println("2006 Kentucky Derby Winner is "
    + name + ".");

```

Answer:

```

Enter the name of the derby winner: Barbaro <ENTER>
2006 Kentucky Derby Winner is Barbaro.

```

2.5 Sample Program: Printing the Initials

No Quick Check Questions.