

Solutions to Quick Check Questions

12

File Input and Output

12.1 File and JFileChooser Objects

1. This question is specific to the Windows platform. Suppose you want to open a file prog1.java inside the directory C:\JavaProjects\Ch11\Step4. What is the actual String value you pass in the constructor for the File class?

The actual string you pass is

```
C:\JavaProjects\Ch11\Step4\prog1.java
```

Note: It is also possible to use the forward slash for all platforms. You can specify the file as

```
C:/JavaProjects/Ch11/Step4/prog1.java
```

This designation will work for all platforms.

2. What is wrong with the following statement?

```
JFileChooser chooser  
= new JFileChooser("Run");
```

```
chooser.showDialog(null);
```

It has the wrong number of arguments. There are different constructors, but they all need the owner frame object as the first argument.

3. Which method of the JFileChooser class do you use to get the filename of the selected file? What is returned from the method if the Cancel button is clicked?

The method is `getSelectedFile`. This method returns null if the user clicks the Cancel button.

12.2 Low-Level File I/O

1. What is the method you call at the end of all file I/O operations?

You call the `close` method so any remaining data in the cache will be saved in the file.

2. What is wrong with the following statements? Assume that `outStream` is a properly declared and created `FileOutputStream` object.

```
byte[] byteArray = { (byte) 'H', (byte) 'i' };  
...  
outStream.print( byteArray );  
...  
outStream.close( );
```

The correct method to use here is `write`, not `print`.

12.3 High-Level File I/O

1. Which type of files can be opened and viewed by a text editor?

You can open and view any ASCII file, also called as a textfile, using a text editor, such as Notepad.

2. Which class is used to save data as a text file? Which class is used to read text files?

Use `PrintWriter` for saving data to a text file and `BufferedReader` for reading text files.

3. Assume `bufReader` is properly declared and created. What is wrong with the following?

```
double d = bufReader.readDouble( );
```

The `BufferedReader` supports only string input with its `readLine` method. This class does not support `readDouble`.

12.4 Object I/O

1. When do you have to include the clause `implements Serializable` to a class definition?

Whenever you want to store the instances of the class to a file.

2. You cannot save the whole array at once—you must save the array elements individually, true or false.

False. You can save the whole array in one statement. There is no need to deal the array elements individually.

12.5 Sample Development: Saving an AddressBook Object

No Quick Check questions.

