

# Solutions to Quick Check Questions

# 12

## File Input and Output

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### 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

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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

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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

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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

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*No Quick Check questions.*