CIS 121 - Quiz 10 - Wednesday, April 2, 2003

Name: ____________________________ Student Number: _______________________

1. (2 pts) In the data hierarchy, the smallest unit of data is the _____________. Eight of these forms a ____________, 2 of which are used to store a char in Java.

2. (2 pts) We can use the _______________ class to write a stream of bytes to a file, whereas we can use the _______________ class to write a stream of characters to a file.

3. (2 pts) In order to write an object to a file, the class definition which was used to create the object must implement the _______________ interface which is a _______________ interface which means it contains no methods and acts as an indication to the compiler and interpreter that the class has a certain capability.

4. (2 pts) Point out at least two errors with the following code.
   import java.io.*;
   public class Question4 {
       public static void main(String[] args) {
           FileInputStream file = new FileInputStream("students.data");
           ObjectInputStream input = new ObjectInputStream(file);
           Student student = readObject();
           input.close();
       }
   }

5. (2 pts) Suppose we want to create a JFrame. How many times will the word Hello appear in the title bar of the JFrame that is displayed when this code is compiled and run? Explain carefully.
   import java.awt.*;
   import javax.swing.*;
   public class Question5 extends JFrame {
       private JButton button;
       public Question5(String title) {
           super(title);
           Container container = getContentPane();
           container.setLayout(null);
           container.add(button = new JButton("Press Me");
           button.setSize(100,20);
           button.setLocation(150,10);
       }
       public static void main(String[] args) {
           Question5 question5 = new Question5("Hello Hello Hello Hello");
           question5.setSize(400,400);
       }
   }