**Quiz Submissions - Test 1**

Top of Form

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**Attempt 1**

Written: Sep 20, 2013 9:00 AM - Sep 20, 2013 9:50 AM

**Submission View**

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| **Question 1** |  | 0 / 2 points |

What is the output -- assume aNumber contains 3  
if (aNumber >= 0)  
     if (aNumber == 0)  
         System.out.print("msg1 ");  
else   
    System.out.print("msg2 ");  
System.out.println("msg3");

Question options:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | msg1 msg3 | |
|  | | |  |  | | --- | --- | | 2) | msg2 | |
|  | | |  |  | | --- | --- | | 3) | msg1 msg2 | |
|  | | |  |  | | --- | --- | | 4) | msg3 | |
|  | | |  |  | | --- | --- | | 5) | msg2 msg3 | |
| **Question 2** | | |  | 0 / 2 points |

Which of the following is used to execute the bytecodes of a Java application?

Question options:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | API | |
|  | | |  |  | | --- | --- | | 2) | javac | |
|  | | |  |  | | --- | --- | | 3) | JRE | |
|  | | |  |  | | --- | --- | | 4) | Java libraries | |
| **Question 3** | | |  | 0 / 2 points |

Which layout simply doesn't display components if they don't fit in the allowed space?

Question options:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | Absolute | |
|  | | |  |  | | --- | --- | | 2) | Box | |
|  | | |  |  | | --- | --- | | 3) | None of these | |
|  | | |  |  | | --- | --- | | 4) | Area | |
|  | | |  |  | | --- | --- | | 5) | Flow | |
| **Question 4** | | |  | 0 / 2 points |

What is the output of the following code:  
for (int ct=1; ct <=10; ct++)  
{    if (count % 2 == 0) continue;  
      System.out.printf(“%d “, ct);  
}//end for

Question options:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | 1 | |
|  | | |  |  | | --- | --- | | 2) | 1 2 | |
|  | | |  |  | | --- | --- | | 3) | 1 2 3 4 5 6 7 8 9 10 | |
|  | | |  |  | | --- | --- | | 4) | 1 3 5 7 9 | |
| **Question 5** | | |  | 0 / 2 points |

You read the following statement in a Java application that compiles and executes.  
Integer.parseInt(tmp);  
What can you say for sure?

Question options:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | parseInt is an instance method | |
|  | | |  |  | | --- | --- | | 2) | tmp is an integer | |
|  | | |  |  | | --- | --- | | 3) | parseInt is a class method | |
|  | | |  |  | | --- | --- | | 4) | parseInt is a class variable / static field | |
|  | | |  |  | | --- | --- | | 5) | none of these | |
| **Question 9** | | |  | 0 / 2 points |

The Java Virtual Machine

Question options:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | translates a Java source file into bytecodes | | | | |
|  | | |  |  | | --- | --- | | 2) | creates a file with extension .class that contains bytecodes | | | | |
|  | | |  |  | | --- | --- | | 3) | can be used on  Windows, Macs, and Linux machines – there is one JVM for all operating systems. | | | | |
|  | | |  |  | | --- | --- | | 4) | none of these | | | | |
| **Question 10** | |  | 0 / 2 points |

Which of the following displays a dialog that allows the user to select a file to be used:

Question options:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | showFileOpen | |
|  | | |  |  | | --- | --- | | 2) | showOpenFileChooser | |
|  | | |  |  | | --- | --- | | 3) | showFileDialog | |
|  | | |  |  | | --- | --- | | 4) | showOpen | |
|  | | |  |  | | --- | --- | | 5) | showOpenDialog | |
|  | | |  |  | | --- | --- | | 6) | none of these | |
| **Question 11** | | |  | 0 / 2 points |

Which class is used to represent a GUI application window, which can have a title bar, an icon, and menus and can be resized?

Question options:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | window | |
|  | | |  |  | | --- | --- | | 2) | panel | |
|  | | |  |  | | --- | --- | | 3) | frame | |
|  | | |  |  | | --- | --- | | 4) | none of these | |
|  | | |  |  | | --- | --- | | 5) | dialog | |
| **Question 12** | | |  | 0 / 2 points |

In this layout manager, components are positioned into one of five logical sections.

Question options:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | Border | |
|  | | |  |  | | --- | --- | | 2) | None of these | |
|  | | |  |  | | --- | --- | | 3) | Box | |
|  | | |  |  | | --- | --- | | 4) | Grid | |
|  | | |  |  | | --- | --- | | 5) | Flow | |
| **Question 15** | | |  | 0 / 2 points |

Which of the following is FALSE regarding bytecodes?

Question options:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | they contain statements written in the Java language | | | |
|  | | |  |  | | --- | --- | | 2) | they are placed in a file with extension  .class by the Java compiler | | | |
|  | | |  |  | | --- | --- | | 3) | they can be run on a variety of operating systems, using the JVM | | | |
|  | | |  |  | | --- | --- | | 4) | they cannot be processed by the Java compiler | | | |
| **Question 17** | |  | 0 / 2 points | |

What is the output of the following code:  
for (int ct=1; ct <=10; ct++)  
{    if (count % 2 == 0) break;  
      System.out.printf(“%d “, ct);  
}//end for

Question options:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | 1 | |
|  | | |  |  | | --- | --- | | 2) | 1 2 3 4 5 6 7 8 9 10 | |
|  | | |  |  | | --- | --- | | 3) | 1 2 | |
|  | | |  |  | | --- | --- | | 4) | 1 3 5 7 9 | |
| **Question 18** | | |  | 0 / 2 points |

When the Java Virtual Machine tries to execute a Java application,

Question options:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | It looks for a method named main. | | | | |
|  | | |  |  | | --- | --- | | 2) | It looks for a class named main. | | | | |
|  | | |  |  | | --- | --- | | 3) | It looks for a method named Main | | | | |
|  | | |  |  | | --- | --- | | 4) | None of these | | | | |
|  | | |  |  | | --- | --- | | 5) | It will be able to execute any class whose name is the same as the name of the file without the extension. | | | | |
| **Question 20** | |  | 0 / 2 points |

Which Java layout manager displays all of the components as the same size?

Question options:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | BoxLayout | |
|  | | |  |  | | --- | --- | | 2) | BorderLayout | |
|  | | |  |  | | --- | --- | | 3) | AbsoluteLayout | |
|  | | |  |  | | --- | --- | | 4) | FlowLayout | |
|  | | |  |  | | --- | --- | | 5) | GridLayout | |
| **Question 21** | | |  | 0 / 2 points |

What can be said about the following statements?  
if (btnChosen == JFileChooser.APPROVE\_OPTION){  
      System.out.println("Directory: " + myChooser.getCurrentDirectory());

Question options:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | APPROVE\_OPTION returns a boolean value (true or false) | | | |
|  | | |  |  | | --- | --- | | 2) | APPROVE\_OPTION returns the path of the file chosen by the user | | | |
|  | | |  |  | | --- | --- | | 3) | APPROVE\_OPTION is a method of the Swing FileChooser class | | | |
|  | | |  |  | | --- | --- | | 4) | none of these | | | |
| **Question 22** | |  | 0 / 2 points | |

Which of the following is TRUE about Java’s ActionListener?

Question options:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | It is an object | | | | |
|  | | |  |  | | --- | --- | | 2) | none of these | | | | |
|  | | |  |  | | --- | --- | | 3) | It is a class that has a method called actionPerformed that is already defined | | | | |
|  | | |  |  | | --- | --- | | 4) | the  programmer must define their own actionPerformed method in order to use the ActionListener. | | | | |
|  | | |  |  | | --- | --- | | 5) | It is an event | | | | |
| **Question 25** | |  | 0 / 2 points |

What would happen when the following is compiled and executed

public class Compare {

public static void main(String args[]){

int x = 10, y;  
if(x < 10) y = 1;  
if(x >= 10) y = 2;  
System.out.println(“y is “ + y);

}//end main

} // end class

Question options:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | |  |  | | --- | --- | | 1) | The program prints y is 0 when executed. | | | |
|  | | |  |  | | --- | --- | | 2) | The program prints y is 1 when executed. | | | |
|  | | |  |  | | --- | --- | | 3) | The program prints y is 2 when executed. | | | |
|  | | |  |  | | --- | --- | | 4) | The program throws a runtime exception. | | | |
|  | | |  |  | | --- | --- | | 5) | The program does not compile -- the message indicates y wasn't initialized. | | | |
| **Question 27** | |  | 0 / 2 points | |

Suppose the command line arguments that are to be supplied to the program :   
1 2 3 4 5  
Show the exact command that would be used to **execute** the program using those command line arguments.

public class test {  
     public static void main(String args[]) {  
           System.out.println(args[0] + " "   
                                        + args[args.length-1]);  
    }  
}

javac test.java 1 2 3 4 5

|  |  |  |
| --- | --- | --- |
| **Question 28** |  | 0 / 2 points |

What is the **exact output** if the command line arguments supplied are 1 2 3 4 5?

public class test {  
     public static void main(String args[]) {  
                  System.out.println(args[0] + " "   
                                      + args[args.length-1]);  
    }  
}

test 5

|  |  |  |
| --- | --- | --- |
| **Question 29** |  | 4 / 6 points |

Use the code shown below to answer the questions:

a. What is the output if the user enters 11 ? Explain your answer.  
  
b. What is the output if the user enters 0? Explain your answer.  
  
int num; String[ ] stuList = {"Smith"};   
Scanner myInput = new Scanner(System.in);  
try{   
     System.out.println("Please enter a number"); num = myInput.nextInt();  
     System.out.println(100/num);  
     System.out.println(stuList[1]);  
}  
catch(ArrayIndexOutOfBoundsException e){  
     System.out.println("index for classList was out of bounds");  
}  
catch(ArithmeticException e){  
     System.out.println("Division by zero is not allowed");  
}  
System.out.println("That's all folks");

a. What is the output if the user enters 11 ? Explain your answer.   
  
9  
That's all folks  
  
100/11 = 9.1 however integers will cut off at the decimal and then continue running the program  
  
b. What is the output if the user enters 0? Explain your answer.  
  
Division by zero is not allowed  
100/0 is a division error and throws the exception, nicely killing the program in its process and telling you what you did wrong.

|  |  |
| --- | --- |
| [[https://mnstate.ims.mnscu.edu/d2l/img/0/Shared.Main.actShow.png?v=10.1.0.427-84](javascript://)View Feedback](javascript://) | |
| **Question 30** | |  | 0 / 16 points |

Provide Java code to   
(10 pts) declare a class called Student which encapsulates data members for name and GPA. Declare the getter and setter methds AND 3 constructors – one that allows creation of a Student object where only the name is supplied, one that allows creation of an Student object where both the name and the GPA are supplied, and one that allows the creation of an Student object with no data supplied.  
  
(6 pts) declare a TestStudent class which can be used to test whether your Student class works correctly. It should declare 3 student objects stuOne, stuTwo, and stuThree, invoking the 3 constructors in your class appropriately AND print the information for each student AND the average GPA of the 3 students.

public class Student  
{  
get name  
set name  
  
get gpa  
set gpa  
}  
  
public class avgGPA  
{  
avgGPA = ((stuOne+stuTwo+stuThree)/3)  
return avgGPA  
}  
  
public class TestStudent  
{  
System.out.println(stuOne, stuTwo, stuThree, avgGPA)  
}

|  |  |  |
| --- | --- | --- |
| **Question 31** |  | 1 / 3 points |

Provide JAVA code (with correct syntax) for the following:   
Declare a constant for the MN sales tax rate of 7.5%.

final MN\_SALES\_TAX = .075;

|  |  |  |
| --- | --- | --- |
| **Question 32** |  | 2 / 3 points |

Suppose payRate = 5. Write a Java statement that would print it EXACTLY as shown below -- use payRate in your statement, not the value:  
  
Pay Rate: $ 5.00

System.out.print("Pay Rate: $")  
System.out.printf(".2%d", payRate)

|  |  |  |
| --- | --- | --- |
| **Question 33** |  | 0 / 3 points |

Suppose tmp is assigned a string that contains only digits (i.e. “578”). Write a Java statement that would convert the string stored in tmp to an integer:

int tmp = str(tmp)

|  |  |  |
| --- | --- | --- |
| **Question 34** |  | 2 / 3 points |

Suppose a Scanner has been declared as shown to obtain input from the keyboard:   
Scanner myInput = new Scanner(System.in);  
Write a Java statement that would read a float into a variable called myGPA.

myGPA = myInput.nextFloat

|  |  |  |
| --- | --- | --- |
| **Question 35** |  | 0 / 3 points |

Suppose a Scanner has been declared as shown to obtain input from a text file.  
Scanner myScanner = new Scanner(new File(“emp.text”));  
Write a Java statement that tests to see if an integer can be read from the file.

try  
{myFile = new FileReader("emp.text"); int c;  
    while ((c = myFile.read()) != -1)

|  |  |  |
| --- | --- | --- |
| **Question 36** |  | 0 / 3 points |

Provide JAVA statements (with correct syntax) for the following:  
Create an object called myChooser of type JFileChooser.

myChooser.JFileChooser

|  |  |  |
| --- | --- | --- |
| **Question 37** |  | 0 / 4 points |

List and explain the Swing components that are used to create menus. Be sure to explain what order they are to be added and what can be done with each.

JFrame

|  |  |
| --- | --- |
| **Attempt Score:** | 29 / 100 |
| **Overall Grade** (highest attempt)**:** | 29 / 100 |

Bottom of Form