

Circle the dot in front of each statement that accurately describes your instructor's course policies:

- If you miss more than three lectures, your grade will be dropped by half a letter grade.
- Lab attendance is required.
- You must submit every lab assignment in order to pass this course.
- Homework is typically due before taking a weekly quiz.
- Having a copy of all or part of another student's source code, not to copy, but just to look at for a little help, is considered cheating.
- All students must submit a copy of their lecture notes before the end of the day.
- Your instructor is such a nice guy that if you turn in an assignment 45 minutes late, he wouldn't consider it late.
- Your instructor will give you a free lunch if you invite him to lunch.

Indicate the result of the following operations (note '0' corresponds to the integer value 48):

```
System.out.println('0' + 1 + 3); // -----
```

```
int i = 0;  
System.out.println(++i); // -----
```

```
int j = 0;  
System.out.println(j++); // -----
```

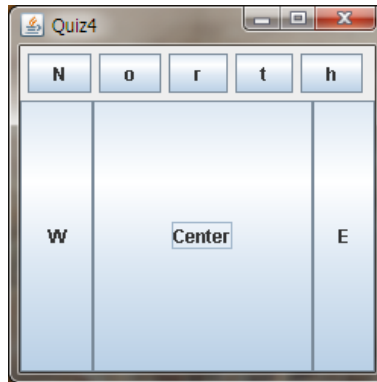
```
int k = 0;  
System.out.println("A" + j++ + 2); // -----
```

1. Composition signifies as a stronger link between classes than aggregation does. Explain in what way the link is stronger.

2. Explain the difference between overriding a method and overloading a method.

(a) Explain the concept of polymorphism/dynamic binding.

(b) List the two types of objects required for event driven programming in Java.



Complete the following code so that it generates the GUI shown above. The buttons across the northern border area should flow from left to right.

```
public class Quiz4 extends JFrame {  
  
    public static void main(String[] args) {  
        JFrame window = new Quiz4();  
        window.setVisible(true);  
    }  
  
    public Quiz4() {  
        super("Quiz4");  
        Container mainPanel = getContentPane();  
        setSize(250, 250);  
        mainPanel.setLayout(new BorderLayout());  
        mainPanel.add(new JButton("W"), BorderLayout.WEST);  
        mainPanel.add(new JButton("E"), BorderLayout.EAST);  
        mainPanel.add(new JButton("Center"));  
    }  
}
```



How do the `throw` and `throws` keywords differ?



Complete the class below that adds a `JButton` (you pick the label on it) to the `JFrame` and displays a pop-up window (think `JOptionPane`) that displays “Quiz 6 rocks”. Assume that all of the appropriate `import` statements have already been made.

```
public class Quiz6 extends JFrame {  
  
    public static void main(String[] args) {  
        JFrame quiz6 = new Quiz6();  
        quiz6.setVisible(true);  
    }  
  
}
```

```
}
```

Write the following method that accepts a filename and a score and appends the score to the file (if it exists, or a creates a new file). Note: `new FileOutputStream(new File(filename), true)`; will create a `FileOutputStream` that will append or create as needed.

```
public static void writeScore(String filename , Score score) {
```

Write the following method that accepts a filename and a score and appends the score to the file (if it exists, or a creates a new file). Note: `new FileOutputStream(new File(filename), true)`; will create a `FileOutputStream` that will append or create as needed.

```
public static void writeScore(String filename , Score score) {
```



Quizzes



Name:

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Write the names of all of the people in the group that you were in for the class activity on Friday. Also, indicate which member of the group was responsible for emailing your work to your instructor.