CIS 121 - Quiz 8 - Wednesday, June 30, 2004

1. (2 pts) When a thread is created, it enters the __________ state, and when a thread is given time in the processor it enters the __________ state.

2. (2 pts) Suppose we have the following two methods in a class definition.

```java
public synchronized void print() {
    for (int counter=0; counter<100; counter++)
        System.out.println("Hello");
}
public synchronized void print(String s) {
    for (int counter=0; counter<100; counter++)
        System.out.println("World");
}
```

If we have two threads created from the class definition containing these methods, thread1 and thread2, and thread1 is executing the first print method, is it possible for thread2 to execute the second print method before the for loop in the first print method is finished? Explain.

3. (2 pts) Suppose we have a class definition called MyClass which does not contain an extends clause nor a constructor in its class definition. Assuming that the Object class has a no-argument constructor, which of the following assignment statements is correct syntax? Explain.

a) MyClass myClass = new Object();
b) Object o = new MyClass();

4. (2 pts) ________________ refers to a dynamic binding that occurs at runtime between a method call and an implementation.

5. (2 pts) How many times is the word Hello displayed in the title bar of the frame that appears when the following code is interpreted? Explain. Read this question carefully.

```java
import java.awt.*;
import javax.swing.*;
public class Question5 extends JFrame {
    public Question5(String title) {
        super(title);
    }
    public static void main(String[] args) {
        Question5 question5 = new Question5("Hello Hello Hello Hello");
        question5.setSize(400,400);
    }
}
```