

Solutions, Quiz 2, CSCI 210, Spring 2004

1. The possible outputs are (c.), (e.), and (g.).
2. Before beginning to run the user program, the OS schedules the clock device to send an interrupt. When this interrupt occurs, the CPU automatically jumps into the exception handler for the clock's interrupt, which would be code existing within the OS. The OS's handler can then preempt the process and schedule another to run.

3.

```
public class Counter extends Thread {
    static int total = 0;

    public void run() {
        for(int i = 1; true; i++) total += i;
    }

    public static void main(String[] args) {
        Counter c = new Counter();
        c.start();

        while(true) {
            System.out.println(total);
            try { Thread.sleep(40);
            } catch(InterruptedException e) {}
        }
    }
}
```