

2006 AP® COMPUTER SCIENCE A FREE-RESPONSE QUESTIONS

- (b) A `DailySchedule` object contains a list of nonoverlapping `Appointment` objects. The `DailySchedule` class contains methods to clear all appointments that conflict with a given appointment and to add an appointment to the schedule.

```
public class DailySchedule
{
    // contains Appointment objects, no two Appointments overlap
    private ArrayList apptList;

    public DailySchedule()
    {
        apptList = new ArrayList();
    }

    // removes all appointments that overlap the given Appointment
    // postcondition: all appointments that have a time conflict with
    //               appt have been removed from this DailySchedule
    public void clearConflicts(Appointment appt)
    {
        /* to be implemented in part (b) */
    }

    // if emergency is true, clears any overlapping appointments and adds
    // appt to this DailySchedule; otherwise, if there are no conflicting
    // appointments, adds appt to this DailySchedule;
    // returns true if the appointment was added;
    // otherwise, returns false
    public boolean addAppt(Appointment appt, boolean emergency)
    {
        /* to be implemented in part (c) */
    }

    // There may be fields, constructors, and methods that are not shown.
}
```

Write the `DailySchedule` method `clearConflicts`. Method `clearConflicts` removes all appointments that conflict with the given appointment.

In writing method `clearConflicts`, you may assume that `conflictsWith` works as specified, regardless of what you wrote in part (a).

Complete method `clearConflicts` below.

```
// removes all appointments that overlap the given Appointment
// postcondition: all appointments that have a time conflict with
//               appt have been removed from this DailySchedule
public void clearConflicts(Appointment appt)
```