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[Document subtitle]



REGISTRATION NO:FA20-BSE-008
SECTION:7A

```

public interface Subject {
    void attach(Observer observer);
    void detach(Observer observer);
    void notifyObservers(String matchStatus);
}

public class LiveCricketMatch implements Subject {
    private List<Observer> observers = new ArrayList<>();
    private String matchStatus;

    @Override
    public void attach(Observer observer) {
        observers.add(observer);
    }

    @Override
    public void detach(Observer observer) {
        observers.remove(observer);
    }

    @Override
    public void notifyObservers(String matchStatus) {
        this.matchStatus = matchStatus;
        for (Observer observer : observers) {
            observer.update(matchStatus);
        }
    }
}

public interface Observer {
    void update(String matchStatus);
}

public class MatchDisplayScreen implements Observer {
    private String matchStatus;

    @Override
    public void update(String matchStatus) {
        this.matchStatus = matchStatus;
    }
}

```

```
        System.out.println("Ball-by-ball Coverage: " + matchStatus);
    }
}
```

```
public class CricketMatchApp {
    public static void main(String[] args) {
        LiveCricketMatch liveMatch = new LiveCricketMatch();

        MatchDisplayScreen screen1 = new MatchDisplayScreen();
        MatchDisplayScreen screen2 = new MatchDisplayScreen();

        liveMatch.attach(screen1);
        liveMatch.attach(screen2);

        liveMatch.notifyObservers("1st Over: 4 runs");

        liveMatch.detach(screen1);

        liveMatch.notifyObservers("2nd Over: Wicket!");
    }
}
```