Cricket score board

NAME-shresth kumar
SAP ID-590026310
BATCH-38
COURSE-C PROGRAMMING

What This Does.

- Tracks Team1 batting → Team2 chasing
- Enter runs ball-by-ball (0,1,2,3,4,6 or 7=wicket)
- Shows live score like on TV
- Strike rotates automatically on odd runs
- Tells you who won at the end

1.AIM OF THE PROJECT.

>To develop a menu-driven C program that works like a cricket scoreboard, allowing the user to:

>Enter team and player details

>Update score ball-by-ball (runs, extras, wickets)

>Track overs and balls

>Display the live scoreboard at any time

>This simulates how a real scoreboard updates during a cricket match (for one batting innings).

2.FEATURE OF THE SCOREBOARD

1.Stores team details,Team name,Up to 11 player names

2. Tracks batting statistics,Runs scored by each player,Balls faced.,Number of 4s and 6s,Whether a player is out or not.

3. Tracks team statistics,Total runs,Total wickets fallen,Total overs (and balls),Extras (wides, no balls, byes/leg-byes as a single count)

4. Menu-driven interface,Add ball details (run, extra, wicket),Display full scoreboard,Exit/end innings

3. Logic / Working (Algorithm Overview)

1. Initialization

Read team name,Read number of players (up to 11),Read each player's name,Initialize all runs, balls, 4s, 6s, and isOut to 0.

Set team total = 0, wickets = 0, overs = 0, balls = 0, extras = 0.

2. Main Menu Loop

Repeatedly show options:

1.Add ball

2. Show scoreboard

3. When user selects "Add ball":

Check if 10 wickets have already fallen → innings over.

Ask: What happened on this ball?

Legal runs: 0,1,2,3,4,6

Wicket

Extra (wide/no-ball/byes)

For legal runs:

Choose the batsman number (index).

Update:Player runs

Player balls faced,4s/6s if applicable

Team total,Legal ball → update ball count:,If 6th ball of the over → overs++, balls = 0,Else balls++

For wicket:

Choose the batsman number who got out.

Mark isOut = 1.

Increment wickets.

Count as a legal ball (same ball/over logic).

For extra:

Increment extras and team total.

Do not increment ball count (like a wide/no-ball).

For wicket:

Choose the batsman number who got out.

Mark isOut = 1.

Increment wickets.

Count as a legal ball (same ball/over logic).

For extra:

Increment extras and team total.

Do not increment ball count (like a wide/no-ball).

Objective:

To simulate a cricket scoreboard using C by tracking player and team performance ball-by-ball.

Data Structures:

Player struct: stores individual batting details.

Team struct: stores team name, array of players, total runs, wickets, overs, balls, and extras.

OUTPUT

```
🏏 LIVE CRICKET SCOREBOARD 🏏
===========================

📋 INNINGS 1 – Team1 Batting
Enter 0-6 for runs, 7 for wicket

Team1: 0/0 (0.0 ov)
Striker: Rohit  |  Non-striker: Gill
Bowler: Starc

Next ball? 5
Rohit scores 5!
Strike rotates!

Team1: 5/0 (0.2 ov)
Striker: Gill  |  Non-striker: Rohit
Bowler: Starc

Next ball? 3
Gill scores 3!
Strike rotates!

Team1: 8/0 (0.3 ov)
Striker: Rohit  |  Non-striker: Gill
Bowler: Starc

Next ball? 4
Rohit scores 4!

Team1: 12/0 (0.5 ov)
Striker: Rohit  |  Non-striker: Gill
Bowler: Starc

Next ball? 5
Rohit scores 5!
Strike rotates!

Team1: 17/0 (0.7 ov)
Striker: Gill  |  Non-striker: Rohit
Bowler: Starc

Next ball? 4
Gill scores 4!

Team1: 21/0 (0.8 ov)
Striker: Gill  |  Non-striker: Rohit
Bowler: Starc

Next ball? 6
Gill scores 6!

Team1: 27/0 (1.0 ov)
Striker: Gill  |  Non-striker: Rohit
Bowler: Starc

Next ball? 7
👋 WICKET! New batsman? ms dhoni
```

```
Team1: 27/1 (1.2 ov)
Striker: ms  |  Non-striker: Rohit
Bowler: Starc

Next ball? 👋 WICKET! New batsman?
Team1: 27/2 (1.3 ov)
Striker: dhoni  |  Non-striker: Rohit
Bowler: Starc

Next ball? 5
dhoni scores 5!
Strike rotates!

Team1: 32/2 (1.5 ov)
Striker: Rohit  |  Non-striker: dhoni
Bowler: Starc

Next ball? 5
Rohit scores 5!
Strike rotates!

Team1: 37/2 (1.7 ov)
Striker: dhoni  |  Non-striker: Rohit
Bowler: Starc

Next ball? 3
dhoni scores 3!
Strike rotates!

Team1: 40/2 (1.8 ov)
Striker: Rohit  |  Non-striker: dhoni
Bowler: Starc

Next ball? 4
Rohit scores 4!

Team1: 44/2 (2.0 ov)
Striker: Rohit  |  Non-striker: dhoni
Bowler: Starc

Next ball? 5
Rohit scores 5!
Strike rotates!

Team1: 49/2 (2.2 ov)
Striker: dhoni  |  Non-striker: Rohit
Bowler: Starc

Next ball? 2
dhoni scores 2!

Team1: 51/2 (2.3 ov)
Striker: dhoni  |  Non-striker: Rohit
Bowler: Starc

Next ball? 3
dhoni scores 3!
Strike rotates!
```

```
Team1: 54/2 (2.5 ov)
Striker: Rohit  |  Non-striker: dhoni
Bowler: Starc

Next ball? 4
Rohit scores 4!

Team1: 58/2 (2.7 ov)
Striker: Rohit  |  Non-striker: dhoni
Bowler: Starc

Next ball? 5
Rohit scores 5!
Strike rotates!

Team1: 63/2 (2.8 ov)
Striker: dhoni  |  Non-striker: Rohit
Bowler: Starc

Next ball? 3
dhoni scores 3!
Strike rotates!

Team1: 66/2 (3.0 ov)
Striker: Rohit  |  Non-striker: dhoni
Bowler: Starc

Next ball? 6
Rohit scores 6!

Team1: 72/2 (3.2 ov)
Striker: Rohit  |  Non-striker: dhoni
Bowler: Starc

Next ball? 5
Rohit scores 5!
Strike rotates!

Team1: 77/2 (3.3 ov)
Striker: dhoni  |  Non-striker: Rohit
Bowler: Starc

Next ball? 6
dhoni scores 6!

Team1: 83/2 (3.5 ov)
Striker: dhoni  |  Non-striker: Rohit
Bowler: Starc

Next ball? 6
dhoni scores 6!

Team1: 89/2 (3.7 ov)
Striker: dhoni  |  Non-striker: Rohit
Bowler: Starc

Next ball? 5
dhoni scores 5!
```

```
Strike rotates!

Team1: 94/2 (3.8 ov)
Striker: Rohit  |  Non-striker: dhoni
Bowler: Starc

Next ball? 6
Rohit scores 6!

🏏 INNINGS 1 END: Team1 100/2
☝ Team2 needs 101 to win

⬛ INNINGS 2 - Team2 Chasing
Team2: 0/0 (0.0 ov)  Need: 101
Striker: Kohli  |  Non-striker: Jadeja

Next ball? 5
Team2: 5/0 (0.2 ov)  Need: 96
Striker: Jadeja  |  Non-striker: Kohli

Next ball? 6
Team2: 11/0 (0.3 ov)  Need: 90
Striker: Jadeja  |  Non-striker: Kohli

Next ball? 5
Team2: 16/0 (0.5 ov)  Need: 85
Striker: Kohli  |  Non-striker: Jadeja

Next ball? 6
Team2: 22/0 (0.7 ov)  Need: 79
Striker: Kohli  |  Non-striker: Jadeja

Next ball? 5
Team2: 27/0 (0.8 ov)  Need: 74
Striker: Jadeja  |  Non-striker: Kohli

Next ball? 4
Team2: 31/0 (1.0 ov)  Need: 70
Striker: Jadeja  |  Non-striker: Kohli

Next ball? 4
Team2: 35/0 (1.2 ov)  Need: 66
Striker: Jadeja  |  Non-striker: Kohli

Next ball? 4
Team2: 39/0 (1.3 ov)  Need: 62
Striker: Jadeja  |  Non-striker: Kohli

Next ball? 4
Team2: 43/0 (1.5 ov)  Need: 58
Striker: Jadeja  |  Non-striker: Kohli

Next ball? 4
Team2: 47/0 (1.7 ov)  Need: 54
Striker: Jadeja  |  Non-striker: Kohli

Next ball? 4
Team2: 51/0 (1.8 ov)  Need: 50
Striker: Jadeja  |  Non-striker: Kohli
```

```
Striker: Jadeja  |  Non-striker: Kohli

Next ball? 4
Team2: 55/0 (2.0 ov)  Need: 46
Striker: Jadeja  |  Non-striker: Kohli

Next ball? 6
Team2: 61/0 (2.2 ov)  Need: 40
Striker: Jadeja  |  Non-striker: Kohli

Next ball? 7
New batsman? surya
Team2: 61/1 (2.3 ov)  Need: 40
Striker: surya  |  Non-striker: Kohli

Next ball? 6
Team2: 67/1 (2.5 ov)  Need: 34
Striker: surya  |  Non-striker: Kohli

Next ball? 3
Team2: 70/1 (2.7 ov)  Need: 31
Striker: Kohli  |  Non-striker: surya

Next ball? 4
Team2: 74/1 (2.8 ov)  Need: 27
Striker: Kohli  |  Non-striker: surya

Next ball? 5
Team2: 79/1 (3.0 ov)  Need: 22
Striker: surya  |  Non-striker: Kohli

Next ball? 2
Team2: 81/1 (3.2 ov)  Need: 20
Striker: surya  |  Non-striker: Kohli

Next ball? 2
Team2: 83/1 (3.3 ov)  Need: 18
Striker: surya  |  Non-striker: Kohli

Next ball? 4
Team2: 87/1 (3.5 ov)  Need: 14
Striker: surya  |  Non-striker: Kohli

Next ball? 5
Team2: 92/1 (3.7 ov)  Need: 9
Striker: Kohli  |  Non-striker: surya

Next ball?
5
Team2: 97/1 (3.8 ov)  Need: 4
Striker: surya  |  Non-striker: Kohli

Next ball? 4

🏆 MATCH OVER! 🏆
Team1: 100/2
Team2: 101/1
🎉 Team2 WINS by 2 wickets!
```