CRICKET SCORECARD MANAGEMENT SYSTEM

INDEX

INTRODUCTION

This program stores and creates scorecard for cricket games and it calculates strike rate, extras, run rate and required runs.

This requires great accuracy and speed which is why a computerised system is proposed.

When the Cricket Scorecard Management program is executed, it works by following the steps described below:

1. First, the program displays the welcome screen which leads up to the main menu.

2. The main menu comprises three options namely:

   1. New game
   2. Display Previous Matches
   3. Exit

3. If '1' is entered, Cricket Scorecard Management program asks for the name of file that will store the cricket scorecard details.

4. After the file is created, the user has to input the following information:
   - Competition
   - Venue
   - Number of overs per innings
   - Number of players per team
   - Team names
   - Details of players of each team
   - Choice of toss winning team

     After entering the above mentioned details, the game begins.

5. If the user inputs '2' in the main menu, the program asks for the name of file. If the file is found, the scorecard is displayed. Otherwise, error message is displayed.

6. If '3' is entered in the main menu, the Cricket Scorecard Management program will terminate.

DOCUMENTATION

The following functions have been used in the program code:

Pre-Defined Functions:

1. system( ) – Function to select the colour of the background and text to be displayed.
2. Beep( ) – Function to specify frequency and duration to produce sound effect.
3. Sleep( ) – Function to suspend execution for an interval (milliseconds).
4. gotoxy( ) – Function to move cursor to a specified location on the screen.
5. randomize( ) – Function to generate a random outcome of the toss.
6. main( ) – Function to begin execution of the program.

User Defined Functions:

1. intro( ) – Function to display the welcome pages of the program
2. headingingame( ) – Function to display the competition name, venue and the name of the two teams.
3. toss(int &z) – Function to decide on which team will bat and bowl by passing team number as argument.
4. displaycol( ) – Function to display the header for batsman details.
5. displaycolforbowler( ) – Function to display the header for bowler details.
6. changestrike(int &i, int p, int q, char balltype, int z) – Function to change the strike and to display the details of the two batsman currently batting.
7. changestrikeover(int &i, int p, int q, int z) – Function to change the strike after each over and to display the details of the two batsman currently batting.
8. displayb(int j, int z, int innings) – Function to display bowler details.
9. batsmanout(int &i, int &p, int &q, int z) – Function to display the details of the batsman who got out.
10. filing(char fname[50]) – Function to put all the data into the user defined file.
11. heading(char fname[50]) – Function to display the competition name, venue and the name of the two teams.
12. input( ) – Function to allow the user to enter details of the competition and file name.
13. display(char fname[20]) – Function to display the scorecard of previous matches.

PROGRAM CODE

```
/***********************************************************************
*                    Cricket Scorecard Management Program Code         *
***********************************************************************/
#include<stdio.h>
#include<fstream.h>
#include<stdlib.h>
#include<string.h>
#include<conio.h>
#include<iomanip.h>
#include<windows.h>


/***********************************************************************
*                    Structure to store data for each team            *
***********************************************************************/
struct Team
{ char name[25];
  struct player
  { char name[20];
    int jno;
    int runs_scored;
    char wickettaker[20];
    int six;
    int four;
    int runs_conceded;
    int wickets;
    int wide;
    int noball;
    float overs;
    float economy;
    float strikerate;
    int ballsfaced;
  } B[11];

  struct innings
  { int runs;
    int run_rate;
    int reqrun_rate;
    int wickets;
    int overs;
    int extras;
  } I;
} T[2];
```

```
/***********************************************************************
*                   Structure to store data for each game             *
***********************************************************************/
struct game
{ int overs;
  char name1[20];
  char name2[20];
  char compname[25];
  char venue[25];
  int wickets;
} G;

void headingingame();

/***********************************************************************
*                   Function for displaying the welcome page          *
***********************************************************************/
void intro()
{ system("color 1E");
  char a[] = "C R I C K E T  S C O R E C A R D  M A N A G E M E N T  S Y S T E M ";
  gotoxy(10, 12);
  for (int f = 0; f < strlen(a); f++)
  { cout << a[f];
    Beep(350, 300);
    Sleep(35);
  }
  char b[] = "Presented by:";
  gotoxy(32, 20);
  for (int f = 0; f < strlen(b); f++)
  { cout << b[f];
    Sleep(95);
  }
  char c[] = "Joel Cecil ";
  gotoxy(32, 22);
  for (int f = 0; f < strlen(c); f++)
  { cout << c[f];
    Sleep(100);
  }
  char d[] = "Class: XII";
  gotoxy(32, 24);
```

```cpp
for (int f = 0; f < strlen(d); f++)
{ cout << d[f];
  Sleep(300);
 }
gotoxy(32, 27);
system("pause");
clrscr();
system("color 5B");
gotoxy(20, 7);
cout << "*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*";
gotoxy(20, 8);
cout << "*This Program Stores And Creates Scorecard For Cricket Games*";
gotoxy(20, 9);
cout << "*And It Performs The Following Calculations         *";
gotoxy(20, 10);
cout << "*1) Strike Rate                     *";
gotoxy(20, 11);
cout << "*2) Extras                        *";
gotoxy(20, 12);
cout << "*3) Runrate                       *";
gotoxy(20, 13);
cout << "*4) Required Runs                   *";
gotoxy(20, 14);
cout << "*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*";
gotoxy(20, 18);
system("pause");
}

/************************************************************************
*                    Function to decide on which team will win the toss         *
*************************************************************************/
void toss(int & z)
{ randomize();
  char choice[20], inntype[15];
  int ch, outcome;
  cout << G.name1 << " Enter your choice Heads or tails ";
  cin >> choice;
  if (!strcmpi(choice, "Heads"))
  ch = 1;
  else
  if (!strcmpi(choice, "Tails"))
  ch = 0;
```

```cpp
  outcome = random(2);
  if (outcome == ch)
  { cout << "\n" << G.name1 << " wins the toss now make your choice (bat/bowl)";
    cin >> inntype;
    if (!strcmpi(inntype, "bat"))
    z = 0;
    else
    if (!strcmpi(inntype, "bowl"))
    z = 1;
  } else
  if (outcome != ch)
  { cout << "\n" << G.name2 << " wins the toss now make your choice (bat/bowl) ";
    cin >> inntype;
    if (!strcmpi(inntype, "bat"))
    z = 1;
    else
    if (!strcmpi(inntype, "bowl"))
    z = 0;
  }
}


/***************************************************************************
*              Function for displaying the header for batsman details.     *
***************************************************************************/
void displaycol()
{ cout << "\nBatsman name" << setw(21) << "Runs scored" << setw(14) << "Balls faced" <<
setw(15) << "6s" << setw(7) << "4s" << "\t" << "Strikerate" << endl;
}


/***************************************************************************
*              Function for displaying the header for bowler details       *
***************************************************************************/
void displaycolforbowler()
{ cout << "\nBowler name" << setw(21) << "Runs conceded" << setw(13) << "Overs bowled"
<< setw(14) << "Wickets" << setw(13) << "Economy" << setw(3) << endl;
}


/***************************************************************************
* Function change the strike and display the details of the two batsmen currently batting.*
***************************************************************************/
void changestrike(int & i, int p, int q, char balltype, int z)
{ gotoxy(1, 18);
  displaycol();
```

```cpp
    gotoxy(1, 20);
    cout << T[z].B[i].name << " *";
    gotoxy(25, 20);
    cout << T[z].B[i].runs_scored;
    gotoxy(40, 20);
    cout << T[z].B[i].ballsfaced;
    gotoxy(61, 20);
    cout << T[z].B[i].six;
    gotoxy(69, 20);
    cout << T[z].B[i].four;
    gotoxy(73, 20);
    cout << T[z].B[i].strikerate << endl;
/*when the runs scored is an odd number the strike changes i.e the other batsman will bat
so the batting variable (i) is interchanged and both the batsman's details are displayed*/
if (balltype == '1' || balltype == '3' || balltype == '5')
  { if (i == p)
    { i = q;
      gotoxy(1, 22);
      cout << T[z].B[i].name;
      gotoxy(25, 22);
      cout << T[z].B[i].runs_scored;
      gotoxy(40, 22);
      cout << T[z].B[i].ballsfaced;
      gotoxy(61, 22);
      cout << T[z].B[i].six;
      gotoxy(69, 22);
      cout << T[z].B[i].four;
      gotoxy(73, 22);
      cout << T[z].B[i].strikerate << endl;
    } else
    { i = p;
      gotoxy(1, 22);
      cout << T[z].B[i].name;
      gotoxy(25, 22);
      cout << T[z].B[i].runs_scored;
      gotoxy(40, 22);
      cout << T[z].B[i].ballsfaced;
      gotoxy(61, 22);
      cout << T[z].B[i].six;
      gotoxy(69, 22);
      cout << T[z].B[i].four;
```

```cpp
      gotoxy(73, 22);
      cout << T[z].B[i].strikerate << endl;
    }
  } else
  if (balltype == '2' || balltype == '4' || balltype == '6' || balltype == '0' || balltype == 'W' ||
balltype == 'w' || balltype == 'o' || balltype == 'O' || balltype == 'n' || balltype == 'N') {
    if (i == p)
    { i = q;
      gotoxy(1, 22);
      cout << T[z].B[i].name;
      gotoxy(25, 22);
      cout << T[z].B[i].runs_scored;
      gotoxy(40, 22);
      cout << T[z].B[i].ballsfaced;
      gotoxy(61, 22);
      cout << T[z].B[i].six;
      gotoxy(69, 22);
      cout << T[z].B[i].four;
      gotoxy(73, 22);
      cout << T[z].B[i].strikerate << endl;
      i = p;
    } else
    { i = p;
      gotoxy(1, 22);
      cout << T[z].B[i].name;
      gotoxy(25, 22);
      cout << T[z].B[i].runs_scored;
      gotoxy(40, 22);
      cout << T[z].B[i].ballsfaced;
      gotoxy(61, 22);
      cout << T[z].B[i].six;
      gotoxy(69, 22);
      cout << T[z].B[i].four;
      gotoxy(73, 22);
      cout << T[z].B[i].strikerate << endl;
      i = q;
    }
  }
  gotoxy(0, 25);
  cout << T[z].name << "  -   " << T[z].I.runs << "/" << T[z].I.wickets << "  Extras: " <<
T[!z].I.extras << endl;
```

```cpp
    getch();
}

/**********************************************************************
 *  Function change strike after each over and display details of batsmen currently batting *
 **********************************************************************/
void changestrikeover(int & i, int p, int q, int z)
{ gotoxy(1, 8);
  displaycol();
  system("color 3E");
  gotoxy(1, 10);
  cout << T[z].B[i].name;
  gotoxy(25, 10);
  cout << T[z].B[i].runs_scored;
  gotoxy(40, 10);
  cout << T[z].B[i].ballsfaced;
  gotoxy(61, 10);
  cout << T[z].B[i].six;
  gotoxy(69, 10);
  cout << T[z].B[i].four;
  gotoxy(73, 10);
  cout << T[z].B[i].strikerate << endl;
  if (i == p)
  { i = q;
    gotoxy(1, 12);
    cout << T[z].B[i].name << " *";
    gotoxy(25, 12);
    cout << T[z].B[i].runs_scored;
    gotoxy(40, 12);
    cout << T[z].B[i].ballsfaced;
    gotoxy(61, 12);
    cout << T[z].B[i].six;
    gotoxy(69, 12);
    cout << T[z].B[i].four;
    gotoxy(73, 12);
    cout << T[z].B[i].strikerate << endl;
  } else
  { i = p;
    gotoxy(1, 12);
    cout << T[z].B[i].name << " *";
    gotoxy(25, 12);
    cout << T[z].B[i].runs_scored;
```

```cpp
    gotoxy(40, 12);
    cout << T[z].B[i].ballsfaced;
    gotoxy(61, 12);
    cout << T[z].B[i].six;
    gotoxy(69, 12);
    cout << T[z].B[i].four;
    gotoxy(73, 12);
    cout << T[z].B[i].strikerate << endl;
  }
  getch();
}


/************************************************************************
*                    Function to display bowler details               *
*************************************************************************/
void displayb(int j, int z, int innings)
{ gotoxy(1, 15);
  displaycolforbowler();
  gotoxy(1, 17);
  cout << T[!z].B[j].name;
  gotoxy(25, 17);
  cout << T[!z].B[j].runs_conceded;
  gotoxy(40, 17);
  cout << T[!z].B[j].overs;
  gotoxy(61, 17);
  cout << T[!z].B[j].wickets;
  gotoxy(71, 17);
  cout << T[!z].B[j].economy << endl;
  if (innings == 2 && (T[z].I.runs <= T[!z].I.runs))
  { cout << T[z].name << "requires " << (T[!z].I.runs - T[z].I.runs)+ 1 << " runs to win " << endl;
    cout << "Required runrate: " << T[z].I.reqrun_rate << " runs per over " << endl;
  }
  getch();
}


/************************************************************************
*   Function to display details of the batsman who got out and the new batsman details   *
*************************************************************************/
void batsmanout(int & i, int & p, int & q, int z)
{ cout << T[z].B[i].name << " Got out by " << T[z].B[i].wickettaker;
  displaycol();
  gotoxy(1, 15);
```

```cpp
cout << T[z].B[i].name;
gotoxy(25, 15);
cout << T[z].B[i].runs_scored;
gotoxy(40, 15);
cout << T[z].B[i].ballsfaced;
gotoxy(61, 15);
cout << T[z].B[i].six;
gotoxy(69, 15);
cout << T[z].B[i].four;
gotoxy(73, 15);
cout << T[z].B[i].strikerate << endl;
if (T[z].I.wickets < G.wickets)
{ if (i == p && p < q)
  { p = q + 1;
    i = p;
  } else
  if (i == p && q < p)
  { p = p + 1;
    i = p;
  } else
  if (i == q && p < q)
  { q = q + 1;
    i = q;
  } else
  if (i == q && p > q)
  { q = p + 1;
    i = q;
  }
  cout << "\n New Batsman in: " << T[z].B[i].name << endl;
  getch();
} else
{ clrscr();
  system("color 3E");
  headingingame();
  cout << "INNINGS OVER" << endl;
  displaycol();
  gotoxy(1, 15);
  cout << T[z].B[i].name;
  gotoxy(25, 15);
  cout << T[z].B[i].runs_scored;
  gotoxy(40, 15);
```

```cpp
        cout << T[z].B[i].ballsfaced;
        gotoxy(61, 15);
        cout << T[z].B[i].six;
        gotoxy(69, 15);
        cout << T[z].B[i].four;
        gotoxy(73, 15);
        cout << T[z].B[i].strikerate << endl;
        if (i == p)
        { i = q;
          gotoxy(1, 17);
          cout << T[z].B[i].name;
          gotoxy(25, 17);
          cout << T[z].B[i].runs_scored;
          gotoxy(40, 17);
          cout << T[z].B[i].ballsfaced;
          gotoxy(61, 17);
          cout << T[z].B[i].six;
          gotoxy(69, 17);
          cout << T[z].B[i].four;
          gotoxy(73, 17);
          cout << T[z].B[i].strikerate << endl;
        } else
        { i = p;
          gotoxy(1, 17);
          cout << T[z].B[i].name;
          gotoxy(25, 17);
          cout << T[z].B[i].runs_scored;
          gotoxy(40, 17);
          cout << T[z].B[i].ballsfaced;
          gotoxy(61, 17);
          cout << T[z].B[i].six;
          gotoxy(69, 17);
          cout << T[z].B[i].four;
          gotoxy(73, 17);
          cout << T[z].B[i].strikerate << endl;
        }
        getch();
      }
    }
```

```
/**************************************************************************
*                    Function for performing file operations            *
**************************************************************************/
void filing(char fname[50])
{ char fname1[50] = "team1", fname2[50] = "team2";
  strcat(fname1, fname);
  strcat(fname2, fname);
  ofstream gamefile(fname, ios::binary);
  ofstream team1file(fname1, ios::binary);
  ofstream team2file(fname2, ios::binary);
  gamefile.write((char * ) & G, sizeof(G));
  team1file.write((char * ) & T[0], sizeof(T[0]));
  team2file.write((char * ) & T[1], sizeof(T[1]));
  gamefile.close();
  team1file.close();
  team2file.close();
}


/**************************************************************************
*      Function to display the competition name, venue and the name of the two teams.  *
**************************************************************************/
void headingingame()
{ cout << "\n" << setw(30) << "COMPETITION NAME: " << setw(3) << G.compname;
  cout << "\n" << setw(40) << "\n AT " << setw(5) << G.venue;
  cout << "\n" << setw(25) << G.name1 << setw(2) << " vs " << setw(2) << G.name2;
  cout << "\n----------------------------------------------------------------------------------------------------
--------------" << endl;
}


void heading(char fname[50])
{ ifstream gamefile(fname, ios::binary);
  while (gamefile.read((char * ) & G, sizeof(G)))
  { cout << "\n" << setw(30) << "COMPETITION NAME: " << setw(3) << G.compname;
    cout << "\n" << setw(40) << "\n AT " << setw(5) << G.venue;
    cout << "\n" << setw(25) << G.name1 << setw(2) << " vs " << setw(2) << G.name2;
    cout << "\n---------------------------------------------------------------------------------------------------
----------------" << endl;
  }
  gamefile.close();
}
```

```
/***************************************************************************
*                    Function to input the data from the user               *
***************************************************************************/
void input()
{ int i, j, p, q, ballno, innings, bno, z = 0, flag = 0, l;
  char balltype, btype[2], fname[20];
  cout << "Enter the filename: ";
  gets(fname);
  clrscr();
  system("color 3E");
  headingingame();
  cout << "\n Enter the Competition Name: ";
  gets(G.compname);
  cout << "\n Enter the Venue: ";
  gets(G.venue);
  cout << "\n Enter the number of overs in an innings: ";
  cin >> G.overs;
  cout << "\n Enter the number of players in a team: ";
  cin >> G.wickets;
  G.wickets -= 1;
  clrscr();
  system("color 3E");
  headingingame();
  cout << "\n Enter name of team 1 : ";
  gets(T[z].name);
  strcat(G.name1, T[z].name);
  cout << "\n\n Enter name of players in team according to order of batting: " << endl;
  for (int k = 0; k <= G.wickets; k++)
  { cout << "Player " << (k + 1) << ":";
    gets(T[z].B[k].name);
    cout << "  Jersey Number: ";
    cin >> (T[z].B[k].jno);
    cout << endl;
  }
  clrscr();
  system("color 3E");
  headingingame();
  cout << "\n Enter name of team 2: ";
  gets(T[!z].name);
  strcat(G.name2, T[!z].name);
  cout << "\n\n Enter name of players in team according to order of batting: " << endl;
```

```cpp
    for (int k = 0; k <= G.wickets; k++)
    { cout << "Player " << (k + 1) << ":";
      gets(T[!z].B[k].name);
      cout << "  Jersey Number: ";
      cin >> (T[!z].B[k].jno);
      cout << endl;
    }
    toss(z);

/********************************************************************
*                          Match begins                           *
********************************************************************/
    for (innings = 1; innings <= 2; innings++, z = !z)
    { p = 0;
      q = 1;
      i = p;
      clrscr();
      system("color 3E");
      headingingame();
      if (innings == 1)
      cout << "\n First innings";
      else
      if (innings == 2)
      { cout << "\n Second innings" << endl;
        if (z == 1)
        cout << G.name2 << " needs " << T[!z].I.runs + 1 << " Runs to win .";
        else
        if (z == 0)
        cout << G.name1 << " needs " << T[!z].I.runs + 1 << " Runs to win .";
      }
      while ((T[z].I.overs < G.overs) && (T[z].I.wickets < G.wickets))
      { cout << "\n Enter bowler number: ";
        cin >> bno;
        cout << endl;
        j = bno - 1;
        cout << T[!z].B[j].name << endl;
        ballno = 1;
        while ((ballno <= 6) && (T[z].I.wickets < G.wickets))
        { clrscr();
          system("color 3E");
          headingingame();
          gotoxy(1, 7);
```

```cpp
cout << "0 (dot ball)  ";
gotoxy(1, 8);
cout << "1 (run) ";
gotoxy(1, 9);
cout << "2 (runs) ";
gotoxy(1, 10);
cout << "3 (runs) ";
gotoxy(1, 11);
cout << "4 (runs) ";
gotoxy(1, 12);
cout << "5 (runs) ";
gotoxy(1, 13);
cout << "6 (runs) ";
gotoxy(1, 14);
cout << "W/w (wide) ";
gotoxy(1, 15);
cout << "N/n (no ball) ";
gotoxy(1, 16);
cout << "O/o (out) " << endl;
cout << "\n Enter the over ";
cin >> btype;
if (strlen(btype) > 1)
{ balltype = '9';
} else
{ balltype = btype[0];
}
// when 1 one run scored
if (balltype == '1')
{ gotoxy(16, 8);
  cout << "~ selected ball" << endl;
  T[z].B[i].runs_scored++;
  T[z].B[i].ballsfaced++;
  T[z].I.runs += 1;
  T[z].B[i].strikerate = (T[z].B[i].runs_scored / (T[z].B[i].ballsfaced * 1.00)) * 100.00;
  T[!z].B[j].runs_conceded++;
  changestrike(i, p, q, balltype, z);
}
// when 0 one run scored  i.e. dot ball
else
if (balltype == '0')
{ gotoxy(16, 7);
```

```cpp
    cout << "~ selected ball" << endl;
    T[z].B[i].runs_scored += 0;
    T[z].B[i].ballsfaced++;
    T[z].I.runs += 0;
    T[!z].B[j].runs_conceded += 0;
    if (T[z].B[i].runs_scored == 0)
    T[z].B[i].strikerate = 0;
    else
    T[z].B[i].strikerate = (T[z].B[i].runs_scored / (T[z].B[i].ballsfaced * 1.00)) * 100.00;
    changestrike(i, p, q, balltype, z);
}
// when 2 runs scored
else
if (balltype == '2')
{ gotoxy(16, 9);
    cout << "~ selected ball" << endl;
    T[z].B[i].runs_scored += 2;
    T[z].B[i].ballsfaced++;
    T[z].I.runs += 2;
    T[z].B[i].strikerate = (T[z].B[i].runs_scored / (T[z].B[i].ballsfaced * 1.00)) * 100.00;
    T[!z].B[j].runs_conceded += 2;
    changestrike(i, p, q, balltype, z);
}
// when 3 runs scored
else
if (balltype == '3')
{ gotoxy(16, 10);
    cout << "~ selected ball" << endl;
    T[z].B[i].runs_scored += 3;
    T[!z].B[j].runs_conceded += 3;
    T[z].B[i].ballsfaced++;
    T[z].B[i].strikerate = (T[z].B[i].runs_scored / (T[z].B[i].ballsfaced * 1.00)) * 100.00;
    T[z].I.runs += 3;
    changestrike(i, p, q, balltype, z);
}
// when 4 runs scored
else
if (balltype == '4')
{ gotoxy(16, 11);
    cout << "~ selected ball" << endl;
    T[z].B[i].runs_scored += 4;
```

```cpp
    T[!z].B[j].runs_conceded += 4;
    T[z].B[i].ballsfaced++;
    T[z].B[i].strikerate = (T[z].B[i].runs_scored / (T[z].B[i].ballsfaced * 1.00)) * 100.00;
    T[z].I.runs += 4;
    T[z].B[i].four++;
    changestrike(i, p, q, balltype, z);
}
// when  5 runs scored
else
if (balltype == '5')
{ gotoxy(16, 12);
  cout << "~ selected ball" << endl;
  T[z].B[i].runs_scored += 5;
  T[z].B[i].ballsfaced++;
  T[z].B[i].strikerate = (T[z].B[i].runs_scored / (T[z].B[i].ballsfaced * 1.00)) * 100.00;
  T[z].I.runs += 5;
  T[!z].B[j].runs_conceded += 5;
  changestrike(i, p, q, balltype, z);
}
// when 6 runs scored
else
if (balltype == '6')
{ gotoxy(16, 13);
  cout << "~ selected ball" << endl;
  T[z].B[i].runs_scored += 6;
  T[z].B[i].ballsfaced++;
  T[z].B[i].strikerate = (T[z].B[i].runs_scored / (T[z].B[i].ballsfaced * 1.00)) * 100.00;
  T[z].I.runs += 6;
  T[!z].B[j].runs_conceded += 6;
  T[z].B[i].six++;
  changestrike(i, p, q, balltype, z);
} else
if (balltype == '9')
{ cout << "\a";
  cout << "Invalid input ";
  ballno--;
}
// when a wide is conceded i.e the ball bowled is bounced out of the crease
else
if (balltype == 'w' || balltype == 'W')
{ gotoxy(16, 14);
```

```cpp
    cout << "~ selected ball" << endl;
     T[!z].B[j].runs_conceded++;
     T[z].I.runs += 1;
     T[!z].B[j].wide++;
     ballno--;
     T[!z].I.extras++;
     changestrike(i, p, q, balltype, z);
    }
// when a no ball is bowled
else
if (balltype == 'n' || balltype == 'N')
{ gotoxy(16, 15);
     cout << "~ selected ball" << endl;
     T[!z].B[j].runs_conceded++;
     T[z].I.runs += 1;
     T[!z].B[j].noball++;
     ballno--;
     flag = 1;
     T[!z].I.extras++;
     changestrike(i, p, q, balltype, z);
    }
// when a batsman is out
else
if (balltype == 'o' || balltype == 'O')
{ gotoxy(16, 16);
     cout << "~ selected ball" << endl;
     if (flag == 1)
     { cout << "\n Not out as it is free hit";
       flag = 0;
       getch();
     }
     /*if a person gets out after a no ball is bowled that person is not out as that ball is a
free hit  i.e. a batsman cannot get out*/
     else
     if (flag == 0)
     { T[z].I.wickets++;
       T[!z].B[j].wickets++;
       T[z].B[i].ballsfaced++;
       strcpy(T[z].B[i].wickettaker, T[!z].B[j].name);
       T[z].B[i].strikerate = (T[z].B[i].runs_scored / (T[z].B[i].ballsfaced * 1.00)) * 100.00;
       changestrike(i, p, q, balltype, z);
```

```cpp
            clrscr();
            system("color 3E");
            headingingame();
            batsmanout(i, p, q, z);
          }
        } else
        { cout << "\a";
          cout << "Invalid input ";
          ballno--;
        }
        ballno++;
        if (innings == 1)
        continue;
        else
        { if (T[z].I.runs >= T[!z].I.runs)
          break;
          else
          continue;
        }
      }
      clrscr();
      system("color 3E");
      headingingame();
      changestrikeover(i, p, q, z);
      T[z].I.overs++;
      T[!z].B[j].overs += 1;
      T[!z].B[j].economy = T[!z].B[j].runs_conceded / T[!z].B[j].overs;
      if (innings == 2)
      { l = G.overs - T[z].I.overs;
        if (l == 0)
        l = 1;
        T[z].I.reqrun_rate = ((T[!z].I.runs + 1) - T[z].I.runs) / l * 1.00;
      }
      displayb(j, z, innings);
      clrscr();
      system("color 3E");
      headingingame();
    }
    if (innings == 1)
    continue;
```

```cpp
    else
    { if (T[z].I.runs >= T[!z].I.runs)
      break;
      else
      continue;
    }
  }
  if (T[0].I.runs + 1 > T[1].I.runs)
  cout << "\n\n" << G.name1 << " Is the WINNER.";
  else
  if (T[0].I.runs + 1 < T[1].I.runs)
  cout << "\n\n" << G.name2 << " Is the WINNER.";
  else
  if (T[0].I.runs == T[1].I.runs)
  cout << "\n\n MATCH TIED.";
   getch();
  filing(fname);
}


/***********************************************************************
*                 Function for displaying the previous matches         *
***********************************************************************/
void display(char fname[20])
{ char fname1[50] = "team1", fname2[50] = "team2";
  int q;
  system("color 3E");
  strcat(fname1, fname);
  strcat(fname2, fname);
  ifstream team1file(fname1, ios::binary);
  ifstream team2file(fname2, ios::binary);
  ifstream gamefile(fname, ios::binary);
  gamefile.read((char * ) & G, sizeof(G));
  cout << "\n" << G.name1 << "  -   " << T[0].I.runs << "/" << T[0].I.wickets << "  Extras: " << T[1].I.extras;
  cout << "\n" << setw(25) << "BATTING";
  displaycol();
  team1file.read((char * ) & T[0], sizeof(T[0]));
  for (int i = 0, j = 13; i <= G.wickets; i++, j++)
  { gotoxy(1, j);
    cout << T[0].B[i].name;
    gotoxy(25, j);
    cout << T[0].B[i].runs_scored;
```

```cpp
    gotoxy(40, j);
    cout << T[0].B[i].ballsfaced;
    gotoxy(61, j);
    cout << T[0].B[i].six;
    gotoxy(69, j);
    cout << T[0].B[i].four;
    gotoxy(73, j);
    cout << T[0].B[i].strikerate << endl;
    q = j + 1;
  }
  cout << "\n\n" << setw(25) << "BOWLING";
  displaycolforbowler();
  for (int i = 0, j = q + 4; i <= G.wickets; i++, j++)
  { gotoxy(1, j);
    cout << T[0].B[i].name;
    gotoxy(25, j);
    cout << T[0].B[i].runs_conceded;
    gotoxy(40, j);
    cout << T[0].B[i].overs;
    gotoxy(61, j);
    cout << T[0].B[i].wickets;
    gotoxy(71, j);
    cout << T[0].B[i].economy << endl;
    q = j + 6;
  }
  cout << "\n";
  for (int f = 0; f < 80; f++)
  { cout << "-";
    Sleep(5);
  }
  cout << endl;
  cout << "\n\n" << G.name2 << "  -   " << T[1].I.runs << "/" << T[1].I.wickets << "  Extras: " << T[0].I.extras;
  cout << "\n\n" << setw(25) << "BATTING";
  displaycol();
  team2file.read((char * ) & T[1], sizeof(T[1]));
  for (int i = 0, j = q + 4; i <= G.wickets; i++, j++)
  { gotoxy(1, j);
    cout << T[1].B[i].name;
    gotoxy(25, j);
    cout << T[1].B[i].runs_scored;
```

```cpp
   gotoxy(40, j);
   cout << T[1].B[i].ballsfaced;
   gotoxy(61, j);
   cout << T[1].B[i].six;
   gotoxy(69, j);
   cout << T[1].B[i].four;
   gotoxy(73, j);
   cout << T[1].B[i].strikerate << endl;
   q = j;
  }
  cout << "\n" << setw(25) << "BOWLING";
  displaycolforbowler();
  for (int i = 0, j = q + 4; i <= G.wickets; i++, j++)
  { gotoxy(1, j);
   cout << T[1].B[i].name;
   gotoxy(25, j);
   cout << T[1].B[i].runs_conceded;
   gotoxy(40, j);
   cout << T[1].B[i].overs;
   gotoxy(61, j);
   cout << T[1].B[i].wickets;
   gotoxy(71, j);
   cout << T[1].B[i].economy;
  }
  if (T[0].I.runs + 1 > T[1].I.runs)
  cout << "\n\n" << G.name1 << " Is the WINNER.";
  else
  if (T[0].I.runs + 1 < T[1].I.runs)
  cout << "\n\n" << G.name2 << " Is the WINNER.";
  else
  if (T[0].I.runs == T[1].I.runs)
  cout << "\n\n MATCH TIED.";
  getch();
  gamefile.close();
  team1file.close();
  team2file.close();
 }
```

```
/***************************************************************************
*                              Main function                             *
***************************************************************************/
void main()
{ int ch;
  char fname[20];
  intro();
  do
  { clrscr();
    system("color 3E");
    cout << "\n\n\n\n\n\t\t\t\tMENU \n\t\t\t\t----";
    cout << "\n\n\t\t\t 1) New game \n\n\t\t\t 2) Display Previous Matches \n\n\t\t\t 3) Exit
\n\n\t\t\t Enter your choice:  ";
    cin >> ch;
    switch (ch)
    { case 1: { input();
                break;
              }
      case 2: { cout << "Enter the filename:";
                gets(fname);
                clrscr();
                heading(fname);
                display(fname);
                break;
              }
      case 3: { cout << "\n Thank you!";
                getch();
                exit(0);
              }
      default: cout << "\n Invalid choice!";
    }
  } while (ch != 3);
  getch();
}
```

INPUT / OUTPUT
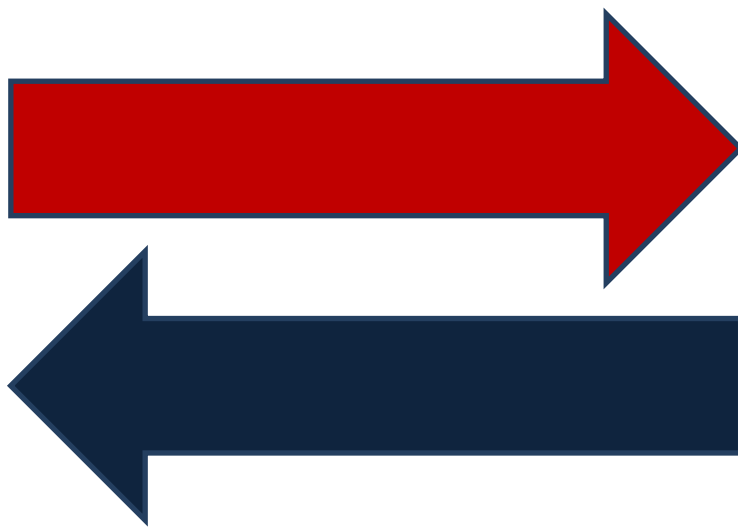
CRICKET SCORECARD MANAGEMENT SYSTEM

Presented by:

Joel Cecil

Class: XII

Press any key to continue . . .


```
*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*
*This Program stores and creates Scorecard for Cricket games*
*and it performs the following calculations              *
 *1)Strike rate                                          *
 *2)Extras                                               *
 *3)Runrate                                              *
 *4)Required runs                                        *
*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*
```

Press any key to continue . . .


```
                          MENU
                          ----
                   1) New Game
                   2) Display Previous Matches
                   3) Exit
Enter your choice:  1
```

Enter the filename: game

COMPETITION NAME:

 AT

                          vs

Enter the Competition name: World Cup

Enter the Venue: New Delhi

Enter the number of overs in an innings: 3

Enter the number of players in a team: 3

COMPETITION NAME: World Cup

AT New Delhi

vs

Enter name of team 1 : India

Enter name of players in team according to order of batting:

Player 1: V Kohli
 Jersey Number: 11

Player 2: R Sharma
 Jersey Number: 22

Player 3: J Bumrah
 Jersey Number: 33

COMPETITION NAME: World Cup

AT New Delhi

India vs

Enter name of team 2: Australia

Enter name of players in team according to order of batting:

Player 1:D Warner
 Jersey Number: 44

Player 2:S Smith
 Jersey Number: 55

Player 3: M Starc
 Jersey Number: 66

India Enter your choice Heads or tails Heads

Australia wins the toss now make your choice (bat/bowl) bat

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

First innings

Enter bowler number: 1

0 (dot ball)
1 (run)   ~ selected ball
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)

Enter the over 1

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
D Warner *	1	1	0	0	100
S Smith	0	0	0	0	0

Australia -   1/0 Extras: 0

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)   ~ selected ball
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 2

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
S Smith *	2	1	0	0	200
D Warner	1	1	0	0	100

Australia -   3/0 Extras: 0

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)   ~ selected ball
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 0

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
S Smith *	2	2	0	0	100
D Warner	1	1	0	0	100

Australia -   3/0 Extras: 0

 Enter the over 3

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
S Smith *	5	3	0	0	166.667
D Warner	1	1	0	0	100

Australia - 6/0 Extras: 0

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)   ~ selected ball
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 4

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
D Warner *	5	2	0	1	250
S Smith	5	3	0	0	166.667

Australia - 10/0 Extras: 0

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)   ~ selected ball
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 5

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
D Warner *	10	3	0	1	333.333
S Smith	5	3	0	0	166.667

Australia -   15/0 Extras: 0

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
S Smith	5	3	0	0	166.667
D Warner *	10	3	0	1	333.333

Bowler name	Runs conceded	Overs bowled	Wickets	Economy
V Kohli	15	1	0	15

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

Enter bowler number: 2

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)   ~ selected ball
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 6

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
D Warner *	16	4	1	1	400
S Smith	5	3	0	0	166.667

Australia - 21/0 Extras: 0

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)   ~ selected ball
O/o (out)

 Enter the over n

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
D Warner *	16	4	1	1	400
S Smith	5	3	0	0	166.667

Australia - 22/0 Extras: 1

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)   ~ selected ball

Enter the over o

Not out as it is free hit

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)   ~ selected ball

 Enter the over o

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
D Warner *	16	5	1	1	320
S Smith	5	3	0	0	166.667

Australia -   22/1 Extras: 1

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

D Warner Got out by R Sharma

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
D Warner	16	5	1	1	320

New Batsman in: M Starc

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia
----
0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)   ~ selected ball
N/n (no ball)
O/o (out)

Enter the over w

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
M Starc *	0	0	0	0	0
S Smith	5	3	0	0	166.667

Australia -   23/1 Extras: 2

COMPETITION NAME: World Cup

 AT New Delhi

India vs Australia
----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)   ~ selected ball
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 6

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
M Starc *	6	1	1	0	600
S Smith	5	3	0	0	166.667

Australia - 29/1 Extras: 2

COMPETITION NAME: World Cup

 AT New Delhi

India vs Australia
----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)   ~ selected ball
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 6

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
M Starc *	12	2	2	0	600
S Smith	5	3	0	0	166.667

Australia - 35/1 Extras: 2

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)   ~ selected ball
W/w (wide)
N/n (no ball)
O/o (out)

Enter the over 6

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
M Starc *	18	3	3	0	600
S Smith	5	3	0	0	166.667

Australia - 41/1 Extras: 2

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
M Starc	18	3	3	0	600
S Smith *	5	3	0	0	166.667

Bowler name	Runs conceded	Overs bowled	Wickets	Economy
R Sharma	26	1	1	26

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

Enter bowler number: 3

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)   ~ selected ball

Enter the over o

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
S Smith *	5	4	0	0	125
M Starc	18	3	3	0	600

Australia - 41/2 Extras: 2

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

INNINGS OVER

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
S Smith	5	4	0	0	125
M Starc	18	3	3	0	600

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
M Starc	18	3	3	0	600
S Smith *	5	4	0	0	125

Bowler name	Runs conceded	Overs bowled	Wickets	Economy
J Bumrah	0	1	1	0

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

Second innings
India needs 42 Runs to win.

Enter bowler number: 1

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)   ~ selected ball
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)

Enter the over 1

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
V Kohli *	1	1	0	0	100
R Sharma	0	0	0	0	0

India - 1/0 Extras: 0

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)   ~ selected ball
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 1

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
R Sharma *	1	1	0	0	100
V Kohli	1	1	0	0	100

India - 2/0 Extras: 0

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)   ~ selected ball
4 (runs)
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 3

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
V Kohli *	4	2	0	0	200
R Sharma	1	1	0	0	100

India - 5/0 Extras: 0

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)   ~ selected ball
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 2

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
R Sharma *	3	2	0	0	150
V Kohli	4	2	0	0	200

India - 7/0 Extras: 0

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)   ~ selected ball
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 0

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
R Sharma *	3	3	0	0	100
V Kohli	4	2	0	0	200

India - 7/0 Extras: 0

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)   ~ selected ball
W/w (wide)
N/n (no ball)
O/o (out)

Enter the over 6

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
R Sharma *	9	4	1	0	225
V Kohli	4	2	0	0	200

India - 13/0 Extras: 0

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
R Sharma	9	4	1	0	225
V Kohli *	4	2	0	0	200

Bowler name	Runs conceded	Overs bowled	Wickets	Economy
D Warner	13	1	0	13

India requires 29 runs to win
Required runrate: 14 runs per over

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

Enter bowler number: 2

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)   ~ selected ball
N/n (no ball)
O/o (out)

 Enter the over w

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
V Kohli *	4	2	0	0	200
R Sharma	9	4	1	0	225

India - 14/0 Extras: 1

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)   ~ selected ball
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 6

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
V Kohli *	10	3	1	0	333.333
R Sharma	9	4	1	0	225

India - 20/0 Extras: 1

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)   ~ selected ball
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 4

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
V Kohli *	14	4	1	1	350
R Sharma	9	4	1	0	225

India -   24/0 Extras: 1

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)   ~ selected ball
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)

 Enter the over 4

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
V Kohli *	18	5	1	2	360
R Sharma	9	4	1	0	225

India -   28/0 Extras: 1

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)   ~ selected ball

Enter the over o

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
V Kohli *	18	6	1	2	300
R Sharma	9	4	1	0	225

India - 28/1 Extras: 1

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

V Kohli Got out by S Smith

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
V Kohli	18	6	1	2	300

 New Batsman in: J Bumrah

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)   ~ selected ball
W/w (wide)
N/n (no ball)
O/o (out)

Enter the over 6

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
J Bumrah *	6	1	1	0	600
R Sharma	9	4	1	0	225

India - 34/1 Extras: 1

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)   ~ selected ball
5 (runs)
6 (runs)
W/w (wide)
N/n (no ball)
O/o (out)

Enter the over 4

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
J Bumrah *	10	2	1	1	500
R Sharma	9	4	1	0	225

India - 38/1 Extras: 1

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
J Bumrah	10	2	1	1	500
R Sharma *	9	4	1	0	225

Bowler name	Runs conceded	Overs bowled	Wickets	Economy
S Smith	25	1	1	25

India requires 4 runs to win
Required runrate: 4 runs per over

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

Enter bowler number: 3

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

----

0 (dot ball)
1 (run)
2 (runs)
3 (runs)
4 (runs)
5 (runs)
6 (runs)   ~ selected ball
W/w (wide)
N/n (no ball)
O/o (out)

Enter the over 6

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
R Sharma *	15	5	2	0	300
J Bumrah	10	2	1	1	500

India - 44/1 Extras: 1

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

Batsman name	Runs scored	Balls faced	6s	4s	Strikerate
R Sharma	15	5	2	0	300
J Bumrah *	10	2	1	1	500

Bowler name	Runs conceded	Overs bowled	Wickets	Economy
M Starc	6	1	0	6

COMPETITION NAME: World Cup

AT New Delhi

India vs Australia

India Is the WINNER.

                              MENU
                              ----
                         1) New Game
                         2) Display Previous Matches
                         3) Exit
Enter your choice: 2

 Enter the filename: game

COMPETITION NAME: World Cup
AT New Delhi
India vs Australia

India - 44/1 Extras: 1

BATTING

Batsman name	Runs scored	Balls faced	6s	4s	Strike rate
V Kohli	18	6	1	2	300
R Sharma	15	5	2	0	300
J Bumrah	10	2	1	1	500

BOWLING

Bowler name	Runs conceded	Overs bowled	Wickets	Economy
V Kohli	15	1	0	15
R Sharma	26	1	1	26
J Bumrah	0	1	1	0

Australia - 41/2 Extras: 2

BATTING

Batsman name	Runs scored	Balls faced	6s	4s	Strike rate
D Warner	16	5	1	1	320
S Smith	5	4	0	0	125
M Starc	18	3	3	0	600

BOWLING

Bowler name	Runs conceded	Overs bowled	Wickets	Economy
D Warner	13	1	0	13
S Smith	25	1	1	25
M Starc	6	1	0	6

India Is the WINNER.

MENU
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1) New Game
2) Display Previous Matches
3) Exit
Enter your choice: 3

Thank you !