

**KIET GROUP OF INSTITUTIONS, GHAZIABAD**  
**COMPUTER SCIENCE AND INFORMATION**  
**TECHNOLOGY**



**PROJECTBASEDLEARNING**

**on**

**CRICKET SCORE SHEET**

**SUBJECT: DATA STRUCTURE USING C LAB(KCS-351)**

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**Aim:** To prepare a cricket score sheet using c language.

**Objective:** To use concept of file handling in c to store various information regarding runs, wickets, overs, extras, and many more to achieve the aim.

**Abstract:**

- The project would begin with the development of a comprehensive list of all the important details that need to be captured during a cricket match, such as runs scored, wickets taken, extras, and the score at the end of each over.
- We would then create the user interface for the score sheet, keeping in mind the intended audience and use cases for the project. The interface would be interactive, user-friendly, and intuitive for the user.
- Once the user interface is completed, we would write the code that powers the score sheet, including features such as real-time updates, data validation, and error handling.
- We would also test the score sheet to ensure that it is accurate, and functions as intended.

Finally, the project would be deployed, either in the form of a website, or as a physical score sheet for use in stadiums and other venues.

**Basic principle:** It uses file handling to store various information regarding runs, wickets, overs, extras, and many more. The program can display runs, wickets, names of batters and bowlers, overs, extras, economy of bowler, strike rate of batters, etc. It also displays the date and time of the game.

**Methodology:**

- **Programming languages:-** Depending on the platform and the level of complexity of the project programming language c is used. Which is to be implemented on visual studio code platform.
- **Fronted web development frameworks:-** HTML is used to create the user interface and user experience for the score sheet.

## **Algorithm:**

1. Start by defining the teams that will be playing the match, the number of overs to be played in a single innings, and the number of balls to be bowled in the match.
2. Prompt the user to input the name of the two teams, the number of overs to be played in a single innings, and which team is batting first.
3. Create a loop for the number of balls to be bowled in the match.
4. Within the loop, prompt the user to input the number of runs scored on the last ball, and whether it was a normal delivery, a no ball, or a wide.
5. Update the score and wickets accordingly.
6. When the loop completes, calculate the run rate by dividing the total score by the number of overs.
7. If the match is a two innings match, repeat steps 3-6 for the second innings.
8. Once both innings are completed, check the scores to determine the winner of the match.
9. Create an HTML file to display the final score, inning details, run rate, etc.
10. End.

## CODING IMPLEMENTATION:

```
#include<stdio.h>
#include<stdlib.h>

struct batsman
{
    char name[25];
    int runs,score,balls,toruns,tobal,ones,twos,threes,fours,sixes;
    int max_six,max_run,max_four;
    float str;

}p11[100],p13;

struct bowler
{
    char name[25];
    int runsgv,wkttkn,overs;
    int max_w;
    float econ;
}p12[100],p14;

int main()
{
    int plno,choice;
    int i,n,m;
    printf("Enter the Batsman detail:\n");
    printf("Enter the number of batsman:\n");
    scanf("%d",&m);
    for(i=0;i<m;i++)
    {

        printf("Enter name of batsman%d:\n",i+1);
        scanf("%s",p11[i].name);

        printf("Enter the number of ones scored by player%d:\n ",i+1);
        scanf("%d",&p11[i].ones);

        printf("Enter the number of twos scored by player%d:\n ",i+1);
        scanf("%d",&p11[i].twos);
```

```

printf("Enter the number of threes scored by player%d:\n ",i+1);
scanf("%d",&p11[i].threes);

printf("Enter the number of fours scored by player%d:\n ",i+1);
scanf("%d",&p11[i].fours);

printf("Enter the number of sixes scored by player%d:\n ",i+1);
scanf("%d",&p11[i].sixes);

printf("Enter the balls played by the player%d:\n",i+1);
scanf("%d",&p11[i].balls);
}

printf("\nEnter the bowlers details:\n");

printf("Enter the number of bowlers:\n");

scanf("%d",&n);

for(i=0;i<n;i++)
{

printf("\nEnter name of bowler%d:",i+1);
scanf("%s",p12[i].name);

printf("Enter the runs given by the bowler%d:\n ",i+1);
scanf("%d",&p12[i].runsgv);
printf("Enter the overs bowled by the bowler%d:\n",i+1);
scanf("%d",&p12[i].overs);

printf("Enter the wickets taken by the bowler%d\n",i+1);
scanf("%d",&p12[i].wkttkn);

}

printf("Thank you all details are recorded\n");

do
{

printf("Enter the choice:\n 1)Batsman detail:\n 2)Bowlers detail:\n
3)Match summary:\n 4)Record:\n 5)Exit\n ");
scanf("%d",&choice);

```

```

switch(choice)
{
    case 1:
        printf("Enter the batsman number to see his details\n");
        scanf("%d",&plno);

        plno--;
        printf("
                                Player Detail\n");
        printf("=====
=====\\n");
        printf("
Batsman        runs        balls        fours        sixes        sr        \\n");
        printf("=====
=====\\n");

        pl1[plno].runs=(1*pl1[plno].ones)+(2*pl1[plno].twos)+(3*pl1[plno].t
hrees)+(4*pl1[plno].fours)+(6*pl1[plno].sixes);
        pl1[plno].str=(pl1[plno].runs*100.00)/pl1[plno].balls;
        printf(" %-15s %-14d %-13d %-11d %-11d %-
9.2f\\n\\n",pl1[plno].name,pl1[plno].runs,pl1[plno].balls,pl1[plno].fours,pl1[plno]
.sixes,pl1[plno].str);

        break;
    case 2:
        printf("Enter the bowlers number to see his details\n");
        scanf("%d",&plno);

        plno--;
        printf("
                                Player Detail\\n  ");
        printf("=====
=====\\n");
        printf("
Bowler        overs        runs        wicket        economy\\n");
        printf("=====
=====\\n");

        for(i=0;i<n;i++)
        {
            pl2[plno].econ=pl2[plno].runsgv/pl2[plno].overs;
            printf(" %-15s %-14d %-13d %-11d %-
11.2f\\n\\n",pl2[plno].name,pl2[plno].overs,pl2[plno].runsgv,pl2[plno].wkttn,pl2[p
lno].econ);
        }

        break;
    case 3:
        printf("
                                Match summary\\n");
        printf("=====
=====\\n");
        printf("
Batsman        runs        balls        fours        sixes        sr        \\n");

```

```

        printf("=====\n");

        for(i=0;i<1;i++)
        {
            pl1[i].runs=(1*pl1[i].ones)+(2*pl1[i].twos)+(3*pl1[i].threes)
+(4*pl1[i].fours)+(6*pl1[i].sixes);
            pl3.toruns+=pl1[i].runs;
            pl1[i].str=(pl1[i].runs*100.00)/pl1[i].balls;
            printf(" %-15s %-14d %-13d %-11d %-11d %-
9.2f\n\n",pl1[i].name,pl1[i].runs,pl1[i].balls,pl1[i].fours,pl1[i].sixes,pl1[i].s
tr);
        }
        printf("TOTAL RUNS:%d\n\n",pl3.toruns);
        printf("\n\n");
        printf("=====\n");
        printf("
Bowler      overs      runs      wicket      economy\n");
        printf("=====\n");

        for(i=0;i<n;i++)
        {
            pl2[i].econ=pl2[i].runsgv/pl2[i].overs;
            printf(" %-15s %-14d %-13d %-11d %-
11.2f\n\n\n",pl2[i].name,pl2[i].overs,pl2[i].runsgv,pl2[i].wkttkn,pl2[i].econ);
        }

        break;

        case 4: pl3.max_run=0,pl4.max_w=0,pl3.max_four=0,pl3.max_six=0;

        for(i=0;i<m;i++)
        {
            p[i].twos+(3*pl1[i].threes)+(4*pl1[i].fours)+(6*pl1[i].sixes
);
            if(pl3.max_run<pl1[i].runs)
            {
                pl3.max_run=pl1[i].runs;
            }

            if(pl3.max_six<pl1[i].sixes)
            {
                pl3.max_six=pl1[i].sixes;
            }

            if(pl3.max_four<pl1[i].fours)
            {
                pl3.max_four=pl1[i].fours;
            }
            if(pl4.max_w<pl2[i].wkttkn)
            {
                pl4.max_w=pl2[i].wkttkn;
            }
        }
    }
}

```



```
        }
    }
    printf("Highest runs scored by the batsman:%d\n",p13.max_run);

    printf("Maximum fours scored by the batsman:%d\n",p13.max_four);

    printf("Maximum sixes scored by the batsman:%d\n",p13.max_six);

    printf("Maximum wickets taken by the bowler:%d\n",p14.max_w);

    break;
case 5:
    exit(1);

default:
    printf("Enter the correct choice\n");
    break;

}

}while(choice!=5);

return 0;
}
```

# OUTPUT

competition:	Venue:				
Match Between:	Versus:				
Toss won by:	Elected To:				
Inning Of:0	Date:				
Batsmanname	Totoal runs		_4s	_6s	
Batsman 1:	0		0	0	
Batsman 2:	0		0	0	
Batsman 3:	0		0	0	
Batsman 4:	0		0	0	
Batsman 5:	0		0	0	
Batsman 6:	0		0	0	
Batsman 7:	0		0	0	
Batsman 8:	0		0	0	
Batsman 9:	0		0	0	
Batsman 10:	0		0	0	
Batsman 11:	0		0	0	
Bowlers	overs	Maidens	Economy	No balls	BTICO
Bowler 1:	0	0	0.00	0	0
Bowler 2:	0	0	0.00	0	0
Bowler 3:	0	0	0.00	0	0
Bowler 4:	0	0	0.00	0	0
Bowler 5:	0	0	0.00	0	0
Bowler 6:	0	0	0.00	0	0
Bowler 7:	0	0	0.00	0	0
Bowler 8:	0	0	0.00	0	0