

CCP Lab Manual

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Chapter 1

Write a Program in C that stores the details of 5 bowlers given by the user. The following are the information stored for each bowler

- 1. Name**
- 2. Nationality**
- 3. No of matches played**
- 4. No of Wickets taken**
- 5. No of overs bowled**
- 6. No of runs conceded**

Then find and display details of

i) the most economic bowler

ii) the bowler with the best strike rate

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

typedef struct
{
    char acName[30];
    char acNationality[30];
    int iMatches, iWickets, iOvers, iRuns;
}BOWLER;

int main()
{
    BOWLER bowlers[5];
    int i, iPosEconomy=0, iPosStrRate=0;
    float fEconomy[5], fStrRate[5],fBestEconomy,fBestStrRate;
    printf("\nEnter details\n");

    for(i=0;i<5;i++)
    {
        printf("Name : ");
```

```

        scanf("%s", bowlers[i].acName);
        printf("Nationality : ");
        scanf("%s",bowlers[i].acNationality);
        printf("Matches Played : ");
        scanf("%d", &bowlers[i].iMatches);
        printf("Wickets taken : ");
        scanf("%d", &bowlers[i].iWickets);
        printf("Overs Bowled : ");
        scanf("%d", &bowlers[i].iOvers);
        printf("Runs Conceded : ");
        scanf("%d", &bowlers[i].iRuns);
    }

    fBestEconomy = fEconomy[0] = (float)bowlers[0].iRuns/bowlers[0].iOvers;
    fBestStrRate = fStrRate[0] = (float)bowlers[0].iOvers/bowlers[0].iWickets;
    printf("Name\t\tNation\t\tMatches   Wickets   Overs   Runs   Economy   SR\n");

    for(i=0;i<5;i++)
    {
        fEconomy[i] = (float)bowlers[i].iRuns/bowlers[i].iOvers;
        fStrRate[i] = (float)bowlers[i].iOvers/bowlers[i].iWickets;
        printf("%-16s", bowlers[i].acName);
        printf("%-10s\t",bowlers[i].acNationality);
        printf("%3d", bowlers[i].iMatches);
        printf("%9d", bowlers[i].iWickets);
        printf("%10d", bowlers[i].iOvers);
        printf("%8d", bowlers[i].iRuns);
        printf("%4.2f",fEconomy[i]);
        printf("%5.2f",fStrRate[i]);
        printf("\n");

        if(fBestEconomy > fEconomy[i])
            iPosEconomy = i;
        if(fBestStrRate > fStrRate[i])
            iPosStrRate = i;
    }
    printf("\nThe Bowler with the best economy is : %s", bowlers[iPosEconomy].acName);
    printf("\nThe Bowler with the best Strike rate is : %s", bowlers[iPosStrRate].acName);
    return 0;
}

```