MCA-II
Advanced Programming
Assignment-I
2020

Note :   (1) Write good menu driven, modular programs (using functions)
         (2) Do not use global variables
         (3) Use proper variable names
         (4) Program should contain program definition as comments and should have popper indentation

Structures and Unions

1. Define a structure called cricket that will classify the following information:-
     a. Player name
     b. Team name
     c. Batting average
  Using cricket declare and array player with 50 elements and write a program to read information about the players and print team wise listing containing names of players with their batting average.

   Given a player name write a program to show all the details of the player.

2. Write a complete 'c' program that will accept the following information for each team in either football or baseball league:
     a. Team name
     b. City
     c. Number of wins
   For a baseball team, add the following information
                     I.   Number of hits
                     II.   Number of runs
                     III.   No. of errors
                     IV.   No. of extra-timing games

   Similarly add the following for a football team
                     I.   No. of ties
                     II.   No. of field goals
                     III.   No. of touchdowns
                     IV.   No. of turn overs
   Enter this information for all the teams in the league then reorder and print the list of teams according to their win-lose records.

3. Write a program that stores and displays the records of the customer. Thee following information for account of the customer is to be stored. Account no, account type, name, old balance, new balance, last payment, date of last payment. Take structure for storing the date

in days, months and year. Also display the current account status by comparing current payment and previous balance. Also calculate the current balance by subtracting the current payment from the previous balance.

4. Write a program to maintain the inventory of the books in a bookshop. The details of the book include:
   a. Author
   b. Title
   c. Price
   d. Publisher
   e. Stock position

   Whenever a customer wants a book, the hopkeeper inputs the title and   author of the books and the program should reply whether it is available   or not by looking through the list of books. If the books is in the list   then the system display the books details and ask for no. of copies.   If the books is not in the list appropriate message should be displayed.   If the no. of copies are available the total cost of the book is displayed   otherwise display appropriate message.

5. Write a complete 'C' program that will accept the following information for each vehicle either two-wheeler and four-wheeler :-

   a. Vehicle Name
   b. Vehicle Price
   c. Vehicle Type [2/4]

   For a two-wheeler , add the following information
   I.   Mileage
   II.   Type (Geared / Gearless)

   Similarly add the following for a four-wheeler
   I.   Usage(Auto / Manual)
   II.   Engine Number
   III. Type (Heavy / Light)

   Enter this information for atleast 10 vehicles and print list of 2 & 4 wheeler vehicles accordingly.

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