

## Lab Assignment 9

1. Write a program that is able to produce balanced meal. Start by defining a structure that contains the name of a food, its calories, its food type such that as meat or fruit and its costs. The food should be stored as an array of structures. The program should construct a meal of four different types which should be input through user and also displayed using for loop.
2. Write a menu driven program that depicts the working of a library. The menu options should be:
  1. Add book information
  2. Display book information
  3. List all books of a specified author
  4. List the title of specified book
  5. List the count of books in the library
  6. ExitCreate a structure called library to hold title of book, author name, price of book and a variable indicating whether book is issued or not.
3. Define a structure that can describe a hotel. It should have members that include the name, address, grade, average room charge and number of rooms.
  1. Print out hotels of a given grade in order of charges.
  2. Print out hotels with room charges less than a given values
4. Write a program to Add Two Distances (in inch-feet) System Using Structures. Program takes two distances in inch-feet system and stores in data members of two Structure variables. Then, this program calculates the sum of two distances and displays it.

```
Enter information for 1st distance
Enter feet: 12
Enter inch: 3.45

Enter information for 2nd distance
Enter feet: 12
Enter inch: 9.2

Sum of distances=25'-0.6"
```

5. Write a C Program to Add Two Complex Numbers by using Structures.