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LAB TASKS:

Task - 01:

Write a program that prompts the user to enter the weight of a person in kilograms and outputs the equivalent weight in pounds. Output both the weights rounded to two decimal places. (Note that 1 kilogram = 2.2 pounds.) Format your output with two decimal places.

Task - 02:

A movie in a local theater is in great demand. To help a local charity, the theater owner has decided to donate to the charity a portion of the gross amount generated from the movie. This example designs and implements a program that prompts the user to input the **movie name, adult ticket price, child ticket price, number of adult tickets sold, number of child tickets sold, and percentage** of the gross amount to be donated to the charity. The output of the program is as follows.

Movie Name: Journey to Mars

Number of Tickets Sold: 2650

Gross Amount: \$ 9150.00

Percentage of Gross Amount Donated: 10.00%

Amount Donated: \$ 915.00

Net Sale: \$ 8235.00

Note that the strings, such as "**Movie Name:**", in the first column are left-justified, the numbers in the right column are right-justified, and the decimal numbers are output with two decimal places.

Input: The input to the program consists of the movie name, adult ticket price, child ticket price, number of adult tickets sold, number of child tickets sold, and percentage of the gross amount to be donated to the charity.

Output: The output is as shown above.

Task - 03:

Write a program that reads a student name followed by five test scores. The program should output the student name, the five test scores, and the average test score. Output the average test score with two decimal places.

Input:

Andrew Miller 87.50 89 65.75 37 98.50

Output: CL217 - Object Oriented Programming Lab Lab Manual - 01

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Student name: Andrew Miller
Test scores: 87.50 89.00 65.75 37.00 98.50
Average test score: 75.55

Task - 04:

Define a struct, **menuItem**, with two components: **menuItem** of type **string** and **menuPrice** of type **double**. Write a program to help a local restaurant automate its breakfast billing system. The program should do the following:

- A. Show the customer the different breakfast items offered by the restaurant.
- B. Allow the customer to select more than one item from the menu.
- C. Calculate and print the bill.

Assume that the restaurant offers the following breakfast items (the price of each item is shown to the right of the item):

Plain Egg \$1.45
Bacon and Egg \$2.45
Muffin \$0.99
French Toast \$1.99
Fruit Basket \$2.49
Cereal \$0.69
Coffee \$0.50
Tea \$0.75

Use an array, **menuList**, of the **struct menuItem**.

A sample output is:

(Note that the billing amount should include a 5% tax.)

Welcome to Johnny's Restaurant
Bacon and Egg \$2.45
Muffin \$0.99
Coffee \$0.50
Tax \$0.20
Amount Due \$4.14

Format your output with two decimal places. The name of each item in the output must be left justified. You may assume that the user selects only one item of a particular type.

You are not allowed to take input for the number of items to be ordered by the customer.

- keep taking orders until the customer exits (using any notation for exit).

- cannot use vectors for this.

- have a fixed Menu List. CL217 - Object Oriented Programming Lab Lab Manual - 01

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Task - 05:

Write a program that declares a struct to store the data of a baseball player (player's name, number of home runs, and number of hits). Declare an array of 10 components to store the data of 10 baseball players. Your program must be able to search the array to find the index of a specific player, and update the data of a player. Your program should be menu driven, giving the user various choices.