OOP's LAB-1 Experiment (Structure/ Union)

Experiment 1. Suppose the postal rates for mailing letters are as follows:

Rs. 0.50 per 10 grams for the first 50 grams,

Rs. 0.40 per 10 grams for the next 100 grams,

Rs. 0.25 per 10 grams for the next 250 grams, and

Rs 25 per kilogram for letters weighing more than 400 grams.

Write a program that prompts for the weight of a letter and prints the postage to be paid.

Experiment 2. A department store places an order with a company for n pieces of miners, m pieces of toasters, and P number of fans. The cost of each item is as follows:

Miners: Rs. 1,500 per piece

Toaster: Rs. 200 per piece

Fan: Rs. 450 per piece

The discount allowed for various items are 5% for miners, 15% for fan, and 10% for toaster.

The company charge 10% as sales tax on all items on net value after deducting the discount.

Write a program that reads m, n, and p and computer the amount to be paid by the store.

Experiment 3: Assume that a publishing company markets prints books and digital books (electronic form – CD'). Create a structure named Publication with data members named title, price, and author's name. From the Publication structure, derive two structures named Book and Ebook. The Book structure adds a page count data member named count, while the Ebook adds data member playing time name time. Each of these structures must have a member function getDatd() to read structure-specific data from the keyboard and display data () to output the structure-specific data to the computer screen. Write a program to test these classes.

Experiment 4: The monthly telephone bill is to be computed as follows:

Minimum Rs. 200 for up to 100 calls

Plus Rs. 0.60 per call for next 50 calls

Plus Rs. 0.50 per call for next 50 calls

Plus Rs. 0.40 per call for any call beyond 200 calls.

The input contains the name of the customer and the number of calls made, and the desired output is the name and telephone bill to be paid by the customer.

Create a class to represent an employee. It should include the following:

Data Members:

Name

Number of calls

Bill amount

Member Functions:

To input data

To compute bill

To output the desired information

Using this structure, write a program to accomplish the intended task.