Structures

[A] STRUCTURES

1. Create a structure called volume that uses three variables (length, width, and high) of type float to model the volume of a room. Define a variable of type volume and initialize its members to the room dimensions: 4.65, 4.2 and 3. Then calculate the volume of the room and print out the result.

2. Create a structure called employee that contains two members: an employee number of type int and an employee salary of type float. Ask the user to fill in this data for three employees, store it in three variables E1, E2 and E3 of type struct employee, and then display the information of the three employees.

3. A point on the two dimensional plan can be represented by two coordinates X and Y. Write a C++ program that uses a structure called Point to model a point. Define three points P1, P2 and P3 of type struct Point and allow a user to input values of two of P1 and P2, then display the coordinates of the third point P3. P3 = P1 + P2.

4. Write a C++ program to create data of a product that defined by product name of type character, product model of type integer and product price of type float. Allow a user to input the data of two products P1 and P2 from the keyboard and then print these data on the screen.

5. Write a C++ program to create data of student that defined by student ID of type integer, student name of type character, and student GPA of type float. Allow a user to input data of three students S1, S2 and S3 from the keyboard and then print the name of the student with highest GPA on the screen.

[B] ARRAY OF STRUCTURES

6. Write a program to create a database for 10 students where each student is defined by stno, stname, staddress, then input data of 5 students and then print out this data.

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7. Write a program to create a database of products where each product is defined by model, name, and price. Then enter the info of 5 products and then print the database of the products.
