C++ Classes Assignments 'ABC' 11-2-2023

1.	**Complex Class** Write the definition for a class called complex that has floating point data members for storing real and imaginary parts. The class has the following member functions: void set(float, float) to set the specified value in object void disp() to display complex number object complex sum(complex) to sum two complex numbers & return complex number 1.Write the definitions for each of the above member functions. 2. Write main function to create three complex number objects. Set the value in two objects and call sum() to calculate sum and assign itin third object. Display all complex numbers.
2.	**Employee Class** Write a program by creating an 'Employee' class having the following methods and print the final salary. 1 - 'getInfo()' which takes the salary, number of hours of work per day of employee as parameter 2 - 'AddSal()' which adds ₹1000 to salary of the employee if it is less than ₹5000. 3 - 'AddWork()' which adds ₹5000 to salary of employee if the number of hours of work per day is more than 6 hours.
3.	**Matrix Class** Create a class called 'Matrix' containing constructor that initializes the number of rows and number of columns of a new Matrix object. The Matrix class has the following information: 1 - number of rows of matrix 2 - number of columns of matrix 3 - elements of matrix in the form of 2D array The Matrix class has methods for each of the following: 1 - get the number of rows 2 - get the number of columns 3 - set the elements of the matrix at given position (i,j) 4 - adding two matrices. If the matrices are not addable, "Matrices cannot be added" will be displayed. 5 - multiplying the two matrices
4.	**Distance Class** Write the definition for a class called Distance that has data member feet as integer and inches as float. The class has the followingmember functions: void set(int, float) to give value to object void disp() to display distance in feet and inches Distance add(Distance) to sum two distances & return distance 1. Write the definitions for each of the above member functions. 2. Write main function to create three Distance objects. Set the value in two objects and call add() to calculate sum and assign it in thirdobject. Display all distances.

5.	**Bank Management Class**
	
	Create a class Bank with the following Data members and **member functions**:
	Data: acno (integer) name[20](character) balance(long)
	  OpenAccount() – It will take input account number, name and opening balance.
	   ShowAccount() – It will display the account details such as account number, name and balance.
	   Deposit() – It will ask for the amount to be added in available balance, and deposit the amount.
	   Withdrawal() – It will ask for the amount to be withdrawn from the available, will also check the available balance, if balance is available, it will deduct the amount from the available balance.
	   Search() – It will search for the record and display the account info.

6.	Class – Print total number of times of member functions calls Use any of the above classs. *Hint : Use a static variable count(integer) as a data member, and increment it in each of the function body.* *Use a dispcountfn() member function to display the count.*

"You're the average of the five people you spend most of your time with".

In fact, five people around you are determining your success!

- Jim Rohn

Your success depends on
How You are spending your free time

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