

# Object Oriented Programming LAB – BSEF19

(Morning and Afternoon)

## Lab 08 – 29-11-2020

You are very much familiar with the EMP and DEPT. These are two types, i.e., classes. For the sake of easiness consider **date** as of string type, and implement the following:

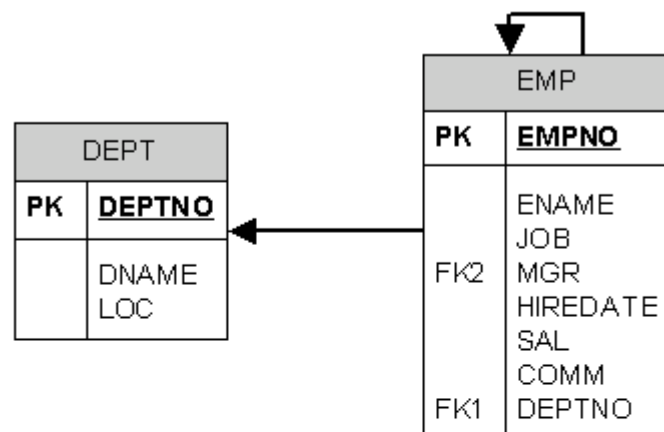
**Task 1:** Create simple classes **EMP** and **DEPT**. Besides data members, these classes have getters/setters, constructors and input/output functions.

**Task 2:** In main logic, create array of 4 objects of type **DEPT** with appropriate values. Later create an array of 14 (or lesser) objects of type **EMP** again with appropriate values. Display all employees and then all departments from these arrays using global functions.

- void dispEMPList(EMP emps[], int count)
- void dispDEPTList(DEPT depts[], int count)

**Task 3:** In a new project, copy/paste all the code from task 2 and modify the **EMP** class to demonstrate **composition** by taking **DEPT** object as its data member. You may take guidance from implementation of SHAPES case study discussed in class.

**Task 4:** In a new project, copy/paste all the code from task 2 and modify the **EMP** class to demonstrate **aggregation** by taking pointer to **DEPT** object as its data member. Here guidance taken from implementation of SHAPES case study will help too.



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