Object Oriented Programming LAB – BSEF19
(Morning and Afternoon)
Lab 09 – 06-12-2020

A company stores *employee number*, *names*, *cnic numbers*, and contact details (*phone* and *address*) of all of its **employees** and pays them on a weekly basis. The employees are of three types: **Salaried** employees are paid a fixed weekly salary regardless of the number of hours worked, **hourly** employees are paid by the hour and receive overtime pay for all hours worked in excess of 40 hours, and **commission** employees are paid a percentage of their sales.

Specific data members for salaried employee are *weekly salary*, hourly employee are *hours worked* and *rate per hour*, and commission employee are *sales total* and *percentage*.

Your task: You have to implement class hierarchy that performs company's payroll calculations (a list of all employees with the amount to pay for the week).

Note the following important points:

1. You must focus on inheritance here, ignore composition and aggregation for this task.

2. You must implement all required constructors and destructors.

3. To save time, make data members public to avoid writing of getters/setters and input/output functions and may provide implementation *any two of derived classes* of **Employee**.

4. You may have to create a class **Payroll** to compose/aggregate *Employees*

5. You MUST have to write driver code (or main function) for sufficient hard coded employee's data.

This lab has resemblance with shapes3.cpp in the following ways:

1. **Employee** class corresponds to shape class, the base of derived classes **Salaried**, **Rated**, or **Commissioned**.

2. Each of the class **Salaried**, **Rated**, or **Commissioned** has a function **calculatePay** to compute weekly payment, like area function in Rectangle and Circle classes

3. **Payroll** class is like the Canvas class with various arrays and their filled counts.

Bonus task: Update your code if all the employees belongs to any of the following departments: sales located in Lahore, accounting located in Kasur, manufacturing located in Faisalabad. [it is an aggregation]