

# **BCS 345 Lab – Classes 2 - Employee**

## ***Overview***

Create a class that contains employee information.

## ***Part 1***

Write a program that will implement an Employee class. The class should have three member variables called name, hoursWorked, and hourlyRate.

- The class should exhibit “data hiding”.
- Write get and set methods for each member variable.
- Write a constructor to initialize all member variables.
- Write a method called GetPay that returns the pay that the employee should make. An employee’s pay is the hours worked times the hourly rate.
- You should declare two instance of the Employee class inside main() and initialize them with different data (use constructor).
- Print name and pay for each employee (hint: use printf)

## ***Part 2***

Add another instance member called overtimeHourlyRate. Make sure to add the appropriate Get/Set methods for this member variable.

Update the GetPay method so that it calculates the pay taking into account overtime hours. The employee should receive normal pay for the first 40 hours worked and overtime pay for any hours worked above 40.

## ***Part 3***

Create a method called SalaryReport. This method should show a breakdown of an employee’s salary. For example:

Pay	Hrs	Rate	Type
400	40	10	Normal
100	5	20	Overtime

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500      Total Pay

## ***Part 4***

Write a class called SmallDepartment. The SmallDepartment class should have the following member variables:

1. Name
2. Id
3. Employee1 – An instance of the Employee class
4. Employee2 – An instance of the Employee class

Write Get/Set methods for each variable.

Write a method called SalaryReport that lists each employee and their pay. Use the '\t' character in the printf format string to create columns in your report.

Create an instance of SmallDepartment inside of main. Use the Set methods to set the values. Also, Make sure you also call SalaryReport.