

## CM 1601 Programming Fundamentals

### Tutorial 8

1. Implement a java program to print the names of employees by creating an **Employee** class. If no name is passed while creating an object of Employee class, then the name should be "Unknown", otherwise the name should be equal to the String value passed while creating object of Employee class.

2. Consider the following scenario and implement the respective java solution.

*“A class called Circle contains two private instance variables, called radius (of type double) and color (of type String), with default value of 1.0 and "red", respectively. Two overloaded constructors must be defined where in the 1<sup>st</sup> constructor, which sets both radius and color to default while in the 2<sup>nd</sup> constructor with given radius, but color default. Additionally, there are two public methods called getRadius() and getArea().”*

3. Consider the following scenario and implement the respective java solution.

*“Animals eat different food. Herbivores are animals and they eat only plants. Carnivores consume only meat while Omnivores eat both plants and meat.”*

4. Consider the following scenario and implement the respective java solution.

*“There are two kinds of employees. Part time employees and Full-time employees. For part time employees you must store the hourly rate. All full-time employees have an EPF number (e.g.: 45) and EPF rate (8%).*

*Part time employees, the salary is calculated as follows.*

- *Salary = hourly rate \* number on hours worked.*
- *The number of hours is entered by the user.*

*Salary of the Full-Time employee is calculated as follows.*

- *Gross salary = Basic salary - (EPF rate) + Allowance”*