**GHANA COMMUNICATION TECHNOLOGY UNIVERSITY**

**FACULTY OF COMPUTER AND INFORMATION SYSTEMS**

**DEPARTMENT OF INFORMATION SYSTEM AND TECHNOLOGY**

**INTRODUCTION TO JAVA (IT304)**

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**BIT TOP UP (EVENING)**

public class Emolument {

private double basic\_salary;

private double tax\_relief;

// Constructor

public Emolument(double basic\_salary, double tax\_relief) {

this.basic\_salary = basic\_salary;

this.tax\_relief = tax\_relief;

}

// Getter for Basic Salary

public double getBasicSalary() {

return basic\_salary;

}

// Getter for Tax Relief

public double getTaxRelief() {

return tax\_relief;

}

// Calculate SSNIT Contribution

public double SSNIT() {

return basic\_salary \* 0.035;

}

// Calculate Taxable Income

public double taxableIncome() {

return basic\_salary - (tax\_relief + SSNIT());

}

}

public class MyEmolument extends Emolument {

// Default Constructor

public MyEmolument() {

super(0, 0);

}

// Parameterized Constructor

public MyEmolument(double basic\_salary, double tax\_relief) {

super(basic\_salary, tax\_relief);

}

// Calculate Income Tax

public double incomeTax() {

double taxableIncome = taxableIncome();

if (taxableIncome <= 500) {

return taxableIncome \* 0.05;

} else if (taxableIncome <= 1000) {

return 500 \* 0.05 + (taxableIncome - 500) \* 0.125;

} else {

return 500 \* 0.05 + 500 \* 0.125 + (taxableIncome - 1000) \* 0.175;

}

}

// Calculate Total Deduction

public double totalDeduction() {

return SSNIT() + incomeTax();

}

// Calculate Net Salary

public double netSalary() {

return getBasicSalary() - totalDeduction();

}

}

import javax.swing.JOptionPane;

public class TestMyEmolument {

public static void main(String[] args) {

// Input Dialogs

String basicSalaryStr = JOptionPane.showInputDialog("Enter Basic Salary:");

double basicSalary = Double.parseDouble(basicSalaryStr);

String taxReliefStr = JOptionPane.showInputDialog("Enter Tax Relief:");

double taxRelief = Double.parseDouble(taxReliefStr);

// Create MyEmolument Object

MyEmolument Staff\_Salary = new MyEmolument(basicSalary, taxRelief);

// Display Results

String message = String.format(

"Basic Salary: %.2f\nTax Relief: %.2f\nSSNIT Contribution: %.2f\nTaxable Income: %.2f\nIncome Tax: %.2f\nTotal Deduction: %.2f\nNet Salary: %.2f",

Staff\_Salary.getBasicSalary(),

Staff\_Salary.getTaxRelief(),

Staff\_Salary.SSNIT(),

Staff\_Salary.taxableIncome(),

Staff\_Salary.incomeTax(),

Staff\_Salary.totalDeduction(),

Staff\_Salary.netSalary());

JOptionPane.showMessageDialog(null, message);

}

}