

GHANA COMMUNICATION TECHNOLOGY UNIVERSITY

COURSE: JAVA L300 TOP-UP

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JAVA ASSIGNMENT.

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```
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);
```

```
}
```

```
}
```