This lab covers inheritance, interfaces, polymorphism, casting and exceptions.

The Java docs, text file, and the driver class for this lab are provided to you separately. You have to define all the classes and their relationships by referring the Java docs.

**Note:** The name of the project will be your “*Lastname*\_Lab07Exceptions”. For example “Smith\_ Lab07Exceptions”.

All classes must be placed in a package named “insurance”.

Follow the below instructions:

1. Use ‘@’ annotation where necessary.
2. Use proper naming conventions.
3. You can draw the UML diagram by referring the Java doc. This is optional and do not submit for grading.

**How to View Javadoc**:

Go to “Javadoc” -> “index.html” to access the javadocs.

Copy the class **Driver** and **Person.txt** into your project and follow the instructions provided in the **Driver class**.

**Sample Output:**

Note: toString() method should be printed on the same line.

toString method of Person class:

Charles Manson Male 65.00

Alfonso Ribeiro Male 26.00

Admiral Nelson Male 10.00

Abraham Hicks Female 40.00

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Testing the calcMontlyInstallment() of FamilyHealthInsurance:

Monthly installment in Family health insurance class: $3060.00

Testing the calcYearlyInstallment() of FamilyHealthInsurance :

Yearly installment in Family health insurance class: $30600.00

Testing the calcLifeInsurance() of FamilyHealthInsurance:

Life insurance in Family health insurance class: $110160.00

Testing the calcExemption() of FamilyHealthInsurance:

Exemption amount in life insurance in Family health Insurance: $31960.00

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

toString method of FamilyHealthInsurance:

Charles Manson Male 65.00; Family Monthly Installment: $3060.00; Family Yearly Installment: $30600.00

Alfonso Ribeiro Male 26.00; Family Monthly Installment: $3060.00; Family Yearly Installment: $30600.00

Admiral Nelson Male 10.00; Family Monthly Installment: $3060.00; Family Yearly Installment: $30600.00

Abraham Hicks Female 40.00; Family Monthly Installment: $3060.00; Family Yearly Installment: $30600.00

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Testing the calcMontlyInstallment() of PersonalHealthInsurance:

Monthly installment in Personal health insurance class: $800.00

Testing the calcYearlyInstallment() of PersonalHealthInsurance:

Yearly installment in Personal health insurance class: $8000.00

Testing the calcLifeInsurance() of PersonalHealthInsurance:

Life insurance in Personal health insurance with Exemption: $28800.00

Testing the calcExemption() of PersonalHealthInsurance:

Exemption amount in life insurance in Personal health insurance: $6800.00

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

toString method of PersonalHealthInsurance:

Calton James Male 6.00; Montly Installment: $800.00; Yearly Installment: $8000.00