

**Q 1B.** A car insurance company has an application to determine the insurance paid by a customer for a car. The application prompts the user to enter the customer's age, the number of non-claims bonus years (that is the number of years the customer did not claim for accidents), and the price of the car. Next, the application computes the insurance the customer must pay according to the rules from the following table:

Age	Non-claim bonus years	Insurance
Up to 27 inclusive	0	0.15 * car's price
	Between 1 and 3 exclusive	0.1 * car's price
	3 or more	0.08 * car's price
More than 27	0	0.09 * car's price
	Between 1 and 3 exclusive	0.07 * car's price
	3 or more	0.06 * car's price

1. Develop an **instantiable class** for this application which contains:

A class definition

Suitable data members (instance variables)

A constructor

All necessary setter methods to set the details provided by the user

A suitable compute method to determine the insurance a customer must pay

A getter method to return the insurance

Name the instantiable class Insurance.

2. Develop an application that uses the instantiable class CarInsurance (the instantiable class previously developed) to calculate the insurance a customer must pay. The application will display the amount of the insurance on the screen. In the application class, please add a short comment for each method of the CarInsurance class that you use/call in your application to explain why that method is needed. Name the application class InsuranceApp.