

Car Insurance Premium Scenario:

The basic cost of an insurance premium for drivers is \$500, however, this premium can increase or decrease depending on four factors i.e (age, gender, marital status, and a number of penalty points). Drivers that are below the age of 25, male and single face an additional premium increase of \$1500. If a driver outside of this bracket is married or female, their premium reduces by \$200, and if they are aged between 46 and 65 then their premium goes down by \$100. Regardless of their status, a driver will be charged an extra \$20 for each penalty point they have up to a maximum of 5. An entry of 0 is made for drivers with no penalty points.

The implementation of the car insurance premium scenario is given below:

```
1. int CarInsurance (int age, char gender, Boolean married, int points)
   {
2.     Premium = 500;
3.     If ( (age<25) && (gender == 'M') && (!married) )
         {
4.         Premium += 1500;
5.     }
6.     else {
7.         if ( married || gender == 'F')
            {
8.             Premium - = 200;
9.         }
10.        if ( (age >45) && (age<65) )
            {
11.            Premium - = 100;
12.        }
13.    }
14.    If (points > 5)
15.        { Points= 5; }
16.    Premium = Premium + points *20;
17.    return Premium;
18. }
```