Conditional Logic p.II

Exercises

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The Date Checker

1. Ask a user for a day, a month and a year.
2. Check if the date exists.

A simple problem that has a lot of exceptions :
- Years have 12 months
- Months can have 30 or 31 days
- Beware of February that has 29 days on leap years and 28 days otherwise
   a. A leap year is divisible by 4
   b. If the year is divisible by 100, it is not a leap year
   c. If the year is divisible by 400, it is a leap year

The Car Insurance

A car insurance company has 4 types of packages, ordered from the least to the most expensive : Green, Blue, Orange & Red.

If the driver is less than 25 years old and his driving license was acquired up to 2 years ago, the company will propose the Red offer. However, if the driver had an accident, the company will refuse to insure him.

If the driver is less than 25 years old but his driving license was acquired more than 2 years ago, the company will propose the Orange offer. Similarly, if the driver had an accident, the company will refuse to insure him.
The company will do the same for drivers that are more than 25 years old with a driving license acquired less than two years ago.

If the driver is more than 25 years old and his driving license was acquired more than 2 years ago, the company will propose the Blue offer. If the driver had an accident, the company will propose the Orange offer. If the driver had two accidents, the company will propose the Red offer.

Finally, the company will reward their customers that bought insurance for 5 years consecutively by reducing the cost of their insurance by one level. ex : a Blue package becomes a Green one.

1. Ask a user for his age, his driving license age, his seniority in the insurance and his number of accidents.
2. Give the proper insurance offer to the user.