

## Class/Home work (input, output, conditional, loops, string)

Write an astrology program in Java, using the appropriate structure (if else, switch, for, while or do-while) knowing that:

The Entries are:

- The user types in a birthday (month and day), and the program responds with the horoscope sign for that birthday.
- The month may be entered as a number from 1 to 12 and the day as a number from 1 to 31.
- Your program should include a loop that lets the user repeat this calculation until the user says she or he is done.

The Outputs:

- The horoscopes sign according to the entered birth date, the element for this sign and the option to quit.

The horoscope signs and dates are:

- |               |                         |
|---------------|-------------------------|
| • Aries       | March 21–April 19       |
| • Taurus      | April 20–May 20         |
| • Gemini      | May 21–June 21          |
| • Cancer      | June 22–July 22         |
| • Leo         | July 23–August 22       |
| • Virgo       | August 23–September 22  |
| • Libra       | September 23–October 22 |
| • Scorpio     | October 23–November 21  |
| • Sagittarius | November 22–December 21 |
| • Capricorn   | December 22–January 19  |
| • Aquarius    | January 20–February 18  |
| • Pisces      | February 19–March 20    |

Horoscope Signs of the same Element are most compatible. There are 4 Elements in astrology, and 3 Signs in each:

- **FIRE** (Aries, Leo, Sagittarius),
- **EARTH** (Taurus, Virgo, Capricorn),
- **AIR** (Gemini, Libra, Aquarius),
- **WATER** (Cancer, Scorpio, Pisces).

According to some astrologers, you are most comfortable with your own sign and the other two signs in your Element. For example, **Aries** would be most comfortable with other Aries and the two other **FIRE** signs, **Leo** and **Sagittarius**.

Modify your program to display the name of the signs that will be compatible for the birthday (ex: for Pisces sign the compatible signs are Cancer and Scorpio).

Use try and catch, and methods of class String, StringTokenizer, Scanner and/or Character to control the input data and to format the output.

Create also the algorithm in natural language for this solution as a comment into your Java file..

Upload the . java file to LEA of Omnivox.

Thank you