

Exercise: MyDate, version 3

MyDate
- day : int - month : int - year : int
+ MyDate(day : int, month : int, year : int) + set(day : int, month : int, year : int) : void + getDay() : int + getMonth() : int + getYear() : int + isLeapYear() : boolean + getMonthName() : String + stepForwardOneDay() : void + numberOfDaysInMonth() : int + isBefore(other : MyDate) : boolean + yearsBetween(other : MyDate) : int + getAstroSign() : String + getAstroElement() : String + toString() : String

Create a new Module and name it `MyDate_v3` – and copy files from `MyDate_v2`.

Modify class `MyDate`:

- Add a method `getAstroSign` that will return a `String` with the name of the astrological sign corresponding to the date.

The 12 astrological signs are:

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

- Add a method `getAstroElement` that will return a `String` with the element of the astrological sign corresponding to the date.

The 4 astrological elements are:

- Fire – for Aries, Leo, Sagittarius
- Earth – for Taurus, Virgo, Capricorn
- Water – for Cancer, Scorpio, Pisces
- Air – for Gemini, Libra, Aquarius

Modify the test application named `MyDateTest` such that you demonstrates class `MyDate`'s new capabilities.