

# Lab 06

## What is your Zodiac?

### Objective:

Write a program that determines a person's astrological zodiac sign based on their birthday.

- Prompt the user for a month and then a day
- The month and day have to be valid
  - Month: 1-12
  - Day: 1-31
  - You do not have to check if the date is real. Such as April 31<sup>st</sup> is not a real date. That's a whole different problem.
- Then determine the person's zodiac symbol
  - Aries = March 21 to April 19
  - Taurus = April 20 to May 20
  - Gemini = May 21 to June 20
  - Cancer = June 21 to July 22
  - Leo = July 23 to August 22
  - Virgo = August 23 to September 22
  - Libra = September 23 to October 22
  - Scorpio = October 23 to November 21
  - Sagittarius = November 22 to December 21
  - Capricorn = December 22 to January 19
  - Aquarius = January 20 to February 18
  - Pisces = February 19 to March 20
- If the data was incorrect (like April 31<sup>st</sup>) then you do not have to print out anything.

### Example Dialog:

```
What is your zodiac? Enter your birthday! Month followed by Day!
6 22
You are a cancer!
```

### Another Example Dialog:

```
What is your zodiac? Enter your birthday! Month followed by Day!
-6 22
Invalid month or day!
```

### Lab Report Questions:

1. Include a flow chart in your proposed solution section
2. Write the equivalent Boolean expression  $!(a > b) \&\&!(b = c)$  which doesn't use the NOT operator (!). Assume that a, b, and c are integers.

### Finally:

Upload the .java file to the dropbox