Lab Report 7

# Problem

The problem is that we need to have the user enter a year. Then using some calculations, determine the animal and element the user’s birth year is.

# Proposed Solution

Start

Have user enter their birthyear

Is the birthyear =< 1924?

End

Use the animal to determine the user’s element.

Then print out the users element and animal.

Yes?

Determine what their animal is based on the remainder of their birthyear when divided by 12

0 = “Rat”, 1 = “Ox”, 2 = “Tiger”, 3 = “Rabbit”, 4 = “Dragon”, 5 = ‘’Snake’’, 6 = ‘’Horse’’, 7 = ‘’Goat’’, 8 = ‘’Monkey’’, 9 = ‘’Rooster’’, 10 = ‘’Dog’’, 11 = “Pig”

No?

End the program

# Tests and Results

I tested the program with different values and no errors occurred.

# Problems Encountered

I didn’t encounter any problems during this lab. However, this was a lot to type out.

# Conclusions and Discussion

There are definitely other ways to solve this problem; however, they all most likey take a similar amount of time to complete.

# Additional Questions

1. In the proposed solution section, draw a flowchart to represent your solution.

2. Suppose x and y are 2 variables that have been given values. How do you test whether the values are equal when the variables are of type int? How about when the variables are of type String? For comparing numeric values, you will use the == sign. When comparing String values, you will use the .equals() method.