***Programming Assignment Lab03A***

Easter Sunday is always the first Sunday after the first full moon after the vernal equinox. This date is determined by the motions of the earth and moon and so can be defined mathematically. **Ask the user** to enter the year.

“mod” = %

(remainder)

A = year mod 19

B = year mod 4

C = year mod 7

D = (19A + 24) mod 30

E = (2B + 4C + 6D + 5) mod 7

day = 22+D+E

If the day is higher than 31, then the date is in April, otherwise the date is in March.

Write a program that asks the user to enter a year, then prints the following output:

Print the word “**was**” (past tense) or "**will be on**” depending on the year.

Enter a year: 1996

My Easter Calculating Program

by: your name here

For the year 1996, Easter Sunday **was** on April 7.

TEST CASES! **Choose 5 dates for Easter** – use the Internet. Make sure you include past and present.. March and April.

***Programming Assignment Lab03B***

This program will convert words to Pig Latin. Convert all original words to lowercase before translating to pig latin.

How to lowercase: **String lower = sentence.toLowerCase();**

If the word begins with a vowel

* the result will be the original string concatenated with "way".

If the string does not begin with a vowel

* the result will be the string beginning with the second letter and ending with the first letter + "ay".

Ask the user to enter a sentence. Show the output as follows:

Enter a sentence: Pig Latin is so cool

My Pig Latin Translator

by: your name here

your original sentence is: Pig Latin is so cool

your pig latin is: igpay atinlay isway osay oolcay