CS410 INTRODUCTION TO COMP SCI APPLIC

Assignment 6 – StudentID

Problem

A certain college has 6 large locations and several other small campuses and assigns each student an ID made up of 4 parts:

- If the student's last name begins with B, C, D, G, J, P, Q, R, S or X then the ID begins with X, if the last name begins with A, E, I, O, U or Y then the ID begins with Y otherwise it begins with Z.
- The next three characters are based on what campus the student attends:

Name of Campus	Abbreviation	Code
Main	Main	101
Centerville	Cent	102
South	Sout	103
Janetown	Jane	104
Cantsburg	Cant	105
Fielding	Fiel	106
Some other campus		110

- The fifth and sixth characters are based on the month of the student's birth:

Month of Birth	Code
Jan, Feb	01
Mar, Apr	02
May, Jun	03
Jul, Aug	04
Sep, Oct	05
Nov, Dec	06

- The last two characters are the length of the student's last name (use leading zero if necessary)

Write a program, **StudentID**, to input a student's last name, campus (4 letter abbreviation), month of birth (3 letter abbreviation) and display the student's ID.

Examples

The code for student Smith on the Fielding campus, born in April is X1060205

The code for student Easterbrooke on the main campus, born in December is Y1010612

Notes

1. Don't "print as you go". You must have a variable that represents the StudentID. Figure out the different parts of the code and concatenate. Then the last line in your program will print that variable.
2. Strings can be input in any mixture of upper and lower case.
3. Your program can only use switch/case statements. **NO IFS ARE ALLOWED**.
4. To read a String with a Scanner use ***`nextLine()`*** or ***`next()`***.

5. You may need to initialize Strings as **""**

6. Some useful String methods you may need in your program:

str.toUpperCase()	returns ***str*** in uppercase
str.toLowerCase()	returns ***str*** in lowercase
str.substring(a, b)	returns substring of ***str*** starting at position a and ending at position b – 1
str.charAt(i)	returns the ***char*** at position i in ***str***
str.length()	returns length of ***str***
str1.concat(str2)	returns the concatenation of ***str1*** and ***str2***
String.valueOf(a)	returns the String representation of primitive ***a***

7. You can assume that the inputs will be correct – no error-handling is necessary.

8. Properly comment, indent and line up your program. Add comments for all variables used.

Turning in the Assignment

1. When you have finished, run your program using the test data below (4 separate runs). Enter the strings exactly as shown.

Name	**Campus**	**Month of Birth**
YOUNg	CANT	Apr
Fowler	jane	NOV
edison	Sout	sep
Rush	kill	Jan

2. Take a screenshot (or two). Upload the screenshots **StudentID.java** and **StudentID.class** files to Canvas.

Due Date: start of class on 2/24