## Programming Assignment #16

Write a C++ program that will prompt a user to input, from the keyboard, their NAME, YEARS OF SERVICE and STATUS. Validate the YEARS OF SERVICE AND STATUS variables.

### **Prompts:**

Please enter your name:

Please enter years of service:

Please enter status:

#### Validation criteria:

YEARS OF SERVICE should be greater than 0 and < 60. STATUS should can be only M for military, C for civilian and A for ambassador.

### **Error Message:**

YEARS OF SERVICE YOS must be between 0 and 60. Please reenter.

STATUS Status must be (M, C or A). Please reenter.

Once valid data is entered, use the **conditional expression**, (discussed on pages 41-46), of Chapter 4 notes to determine whether or not you are an amateur or a professional. Using the single conditional expression, you should print out one of the two following statements (if years of service is 30 or greater, the person is classified as a professional otherwise he is classified as an amateur.

**Entered name**, based on your years of experience, your classification is PROFESSIONAL. or

Entered name, based on your years of experience, your classification is AMATEUR.

Then you are to use the **if else if** to determine of a person is eligible for retirement.

#### **Conditions for retirement:**

If a person is an

ambassador and has 10 or more years, he is eligible for retirement, civilian and has 30 or more years, he is eligible for retirement, military and has 20 or more years, he is eligible for retirement.

Sample output: As a(n) ambassador, you are eligible for retirement.

If statement does not holds true, output

SORRY! As a(n) \_\_\_\_\_, you must put in \_\_\_\_\_ more years for retirement.

Sample output: SORRY! As a(n) ambassador, you must put in 2 more years for retirement.

# Programming Assignment #17a

Write a C++ program that read from a data file NAME and CODE. Using the if else if, to output

NAME, you are classified as a Freshman.

Or

**NAME**, you are classified as a Sophomore.

Or

**NAME**, you are classified as a Junior.

Or

**NAME**, you are classified as a Senior.

Where: 1 = Freshman, 2 = Sophomore, 3 = Junior and 4 = Senior.

Once you have process the entire file, you are to output

There are:

99 freshmen

99 sophomores

99 juniors and

99 seniors

A total of: 999 students.

## **Input file Specs:**

Name: input.dat

Content:

Bill	2
Tim	1
Sue	3
Jane	2
Mary	1
Sara	4
Bobby	4
Allen	2
Betty	1
Sharron	2
Charles	3
Glen	2
James	1
Louis	2
Ashley	1

# Programming Assignment #17b

Using the previous instructions in #17a, instead of using if else if, now use the switch statement