

CSCD 210

Lab 4

SPECIFICATIONS

EWU is 3.5 million in the hole, meaning EWU is probably going to raise your tuition. Your task is to write a tuition calculation program.

You will prompt the user for the following in this order:

- Number of total credits the student is taking - int
- Is the student a WA resident – as 'Y' or 'N' - char
- Is the student a graduate student – as “yes” or “no” - String
- The percentage of increase will tuition be raised for the 2020-2021 school year - double

Percentage will be entered as a decimal as a value such as 11.5 not .115

The current tuition can be found at:

<https://inside.ewu.edu/financialservices/student-financial-services/costs-and-fees/tuition-rates/>

You don't need to worry about fees, just tuition. Only use the quarter tuition and don't use the WUE tuition rates. Also note that a student pays the same rate for 10 to 18 credits. A student can have more than 18 credits but not more than 25 credits. Enforce this restriction via throwing an exception. This will be discussed in class.

You will display what the normal tuition would be for the current rate, and then what the new tuition would be based on the percentage increase.

POINTS TO PONDER

- How do you convert 11.5 to .115?
- What about rounding? – Hint Math class
- Do I need to print graduate/undergraduate? - **Yes**
- Do I need to print resident/non-resident? – **Yes**
- Do I need to worry about case – **Yes**

NOTES

- You must declare the current tuition rates as constants
- Output must be formatted to two decimal places
- You must read input in the order stated
- I have provided starting code which you can't change, and you must use
- You must run your code at least 8 times testing boundary cases. One test case must be for credits more than 25. Name the output file **cscd210lab4out.txt**

TO TURN IN

A **zip** file that contains Lab4 folder:

- All packages and all source code
- Your output file

Name your zip file with **your** last name followed by the first initial of your first name lab4.zip
(Example: **steinerslab4.zip**)

SAMPLE RUN

Welcome to the Tuition Calculator Program

How many total credits are you taking? 9

Are you a WA resident (Y/N)? Y

Are you a graduate student (Yes/No)? No

What percentage increase? 11.5

RESULTS

An undergraduate resident taking 9 credits currently pays \$218.09 per credit for a total of \$1962.81

With an increase in tuition of 11.5% per credit tuition goes up \$243.17, and an undergraduate resident taking 9 credits will pay \$2188.53