

Lab Assignment #2 – Selection Structures

Recall that lab assignments must be completed during the class period and must be demonstrated to the instructor. Let the instructor know when you are ready to demonstrate your final program.

Shown below is the 2007 Tax Rate Schedule for Virginia.

Write a C++ program according to the following specifications:

- Request that the user enter their Virginia Taxable Income
- Print an error message and terminate the program if a negative value is entered
- Use an if structure to calculate the amount of tax owed
- Print the Virginia Taxable Income and the Tax Owed with a dollar sign (\$) and two digits after the decimal point.
- Test the program for each of the four valid ranges and for an invalid input.
- Demonstrate the program to the instructor.

TAX RATE SCHEDULE

IF YOUR VIRGINIA TAXABLE INCOME IS:

Not over \$3,000, your tax is 2% of your Virginia taxable income.

over—	but not over—	your tax is—	of excess over—
\$ 3,000	\$ 5,000	\$ 60 + 3 %	\$ 3,000
\$ 5,000	\$ 17,000	\$ 120 + 5 %	\$ 5,000
\$ 17,000		\$ 720 + 5.75 %	\$ 17,000

Example

If your taxable income is \$90,000, your tax is \$720 + 5.75% of the amount over \$17,000.
This equals $\$720 + (.0575 \times \$73,000) = \$720 + \$4,197.50 = \$4,917.50$ which should be rounded to **\$4,918**.

Reference: http://www.tax.virginia.gov/web_pdfs/taxtable.pdf