

# CPP Problem Design

Subject: Compute The Tax

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Main testing concept: if else statement

## Basics

- ☒ C++ BASICS
- ☒ FLOW OF CONTROL
- ☐ FUNCTION BASICS
- ☐ PARAMETERS AND OVERLOADING
- ☐ ARRAYS
- ☐ STRUCTURES AND CLASSES
- ☐ CONSTRUCTORS AND OTHER TOOLS
- ☐ OPERATOR OVERLOADING, FRIENDS, AND REFERENCES
- ☒ STRINGS
- ☐ POINTERS AND DYNAMIC ARRAYS

## Functions

- ☐ SEPARATE COMPILATION AND NAMESPACES
- ☐ STREAMS AND FILE I/O
- ☐ RECURSION
- ☐ INHERITANCE
- ☐ POLYMORPHISM AND VIRTUAL FUNCTIONS
- ☐ TEMPLATES
- ☐ LINKED DATA STRUCTURES
- ☐ EXCEPTION HANDLING
- ☐ STANDARD TEMPLATE LIBRARY
- ☐ PATTERNS AND UML

## Description:

In one state, single residents are subject to the following income tax:

Income	Amount of tax
Not over \$750	1% of income
\$750—\$2, 250	\$7. 50 plus 2% of amount over \$750
\$2, 250—\$3, 750	\$37. 50 plus 3% of amount over \$2, 250
\$3, 750—\$5, 250	\$82. 50 plus 4% of amount over \$3, 750
\$5, 250—\$7, 000	\$142. 50 plus 5% of amount over \$5, 250
Over \$7, 000	\$230. 00 plus 6% of amount over \$7, 000

## Input:

Float larger than 0.

## Output:

Output the tax.

## Sample Input / Output :

Sample Input	Sample Output
750	7. 50
2250	37. 50
4000	92. 50

- ☒ Easy, Only basic programming syntax and structure are required.
- ☐ Medium, Multiple programming grammars and structures are required.
- ☐ Hard, Need to use multiple program structures or complex data types.

**Expected solving time:**

10 minutes

**Other notes:**