

Program Name: taxes.cpp

Input File: taxes.dat

Have you ever wondered how what you pay in federal taxes compares to the total collected? It is popular for people to assume that they are paying much more than everyone else. So, the government wants to create a web site that compares different people's amounts of tax. (OK, so they probably would not actually build such a web site, but we can pretend.)

Table 1 below shows the graduated income tax schedule for 1999.

Table 1: Federal Income Taxes

Salary Range		Formula to Compute Federal Income Taxes
Minimum	Maximum	
\$0	\$15000	Federal Income Taxes = \$0
\$15001	\$28450	Federal Income Taxes = ( Income - \$15000 ) * 0.15
\$28451	\$54850	Federal Income Taxes = \$2017.50 + ( ( Income - \$28450 ) * 0.28 )
\$54851	\$87250	Federal Income Taxes = \$9409.50 + ( ( Income - \$54850 ) * 0.31 )
\$87251	\$111500	Federal Income Taxes = \$19453.50 + ( ( Income - \$87250 ) * 0.36 )
\$111501	Unlimited	Federal Income Taxes = \$28183.50 + ( ( Income - \$111500 ) * 0.39 )

In addition to the Federal Income Taxes, there are Social Security Income (SSI) and Medicare Taxes structured as described in Table 2.

Table 2: Social Security and Medicare Taxes

Salary Range		Formula to Compute Social Security Income (SSI) and Medicare Taxes
Minimum	Maximum	
\$0	\$83400	SSI and Medicare Taxes = ( Income * 0.0765 )
\$83401	Unlimited	SSI and Medicare Taxes = \$5004.00 + ( Income * 0.0165 )

The "Total Income Taxes" are the sum of the "Federal Income Taxes" and the "SSI and Medicare Taxes". All taxes are computed in dollars and cents. Fractions of pennies are discarded, not rounded. The following table shows some sample incomes and their associated taxes.

Income	Federal Income Taxes	SSI and Medicare Taxes	Total Income Taxes
\$45674	$(\$2017.50 + ((\$45674 - \$28450) * 0.28) = \$6840.22$	$(\$45674 * 0.0765) = \$3494.06$	<b>\$10334.28</b>
\$12222	<b>\$0.00</b>	$(\$12222 * 0.0765) = \$934.98$	<b>\$934.98</b>
\$215426	$(\$28183.50 + ((\$215426 - \$111500) * 0.39) = \$68714.64$	$(\$5004.00 + (\$215426 * 0.0165)) = \$8558.52$	<b>\$77273.16</b>

Your program will be given a series of income values. For each income, your program should compute the Total Income Taxes based on the formulas in Table 1 and Table 2.

### Input

Input to your program consists of a series of income values ( $1 \leq \text{Income} \leq 10000000$ ). Each income is expressed as an integer in dollars on a line by itself. Incomes do not have leading zeroes, nor do they contain anything other than numeric digits. They are not preceded by the "\$" symbol.

### Output

For each income, your program is to compute the total taxes for the income and print the total taxes on a line by itself. The format of your total taxes output **must** have a "\$" in column 1 followed by the number of dollars starting

in column 2, followed by a decimal point, followed by 2 digits of cents. The dollars component of the total taxes must be at least one digit long and have no leading zeroes. Zero dollars is expressed as a single zero digit (\$0.00).

**NOTE:** This problem is representative of a real world problem and the challenges faced when working with dollars and cents. The output from your program may differ from the sample output shown below by a few pennies. The differences may be due to:

- the data types used
  - the order in which operations are performed
  - the processor
  - the compiler (16-bit or 32-bit)
- etc.

**Example: Input File**

```
45674
12222
215426
73468
```

**Output to screen**

```
$10334.28
$934.98
$77273.16
$20801.38
```