Lab 03 - Computing Tax

Points: 100 points

Problem Description:

The United States federal personal income tax is calculated based on filing status and taxable income. There are four filing statuses: single filers, married filing jointly, married filing separately, and head of household. The tax rates vary every year. Table 3.2 shows the rates for 2009. If you are, say, single with a taxable income of $10,000, the first $8,350 is taxed at 10% and the other $1,650 is taxed at 15%. So, your tax is $1,082.5.

Table 1
2009 U.S. Federal Personal Tax Rates

Marginal Tax Rate	Single	Married Filing Jointly or Qualified Widow(er)	Married Filing Separately	Head of Household
10%	$0 – $8,350	$0 – $16,700	$0 – $8,350	$0 – $11,950
15%	$8,351– $33,950	$16,701 – $67,900	$8,351 – $33,950	$11,951 – $45,500
25%	$33,951 – $82,250	$67,901 – $137,050	$33,951 – $68,525	$45,501 – $117,450
28%	$82,251 – $171,550	$137,051 – $208,850	$68,525 – $104,425	$117,451 – $190,200
33%	$171,551 – $372,950	$208,851 – $372,950	$104,426 – $186,475	$190,201 - $372,950
35%	$372,951+	$372,951+	$186,476+	$372,951+

You are to write a program to compute personal income tax. Your program should prompt the user to enter the filing status and taxable income and compute the tax. Enter 0 for single filers, 1 for married filing jointly, 2 for married filing separately, and 3 for head of household.

Here are sample runs of the program:

Sample 1:
```
Enter the filing status: 0
Enter the taxable income: 100000
Tax is 21720.0
```

Sample 2:
```
Enter the filing status: 1
Enter the taxable income: 300339
Tax is 76932.87
```

Sample 3:
```
Enter the filing status: 2
Enter the taxable income: 123500
Tax is 29665.5
```

Sample 4:
```
Enter the filing status: 3
```

```
Enter the taxable income: 4545402
Tax is 1565250.7
```

Analysis:
(Describe the problem including input and output in your own words.)

Design:
(Describe the major steps for solving the problem.)

Coding: (Copy and Paste Source Code here. Format your code using `Courier 10pts`)

Name your class Exercise03_13

Testing: (Describe how you test this program)

iCollege Submission and Grading

After you have completed and thoroughly tested your program, upload and submit the **.doc and .java and .class files** to iCollege under Assessments --> Assignments --> Programming Lab Project 3. Always double check that your submission was successful on iCollege!

The lab will be graded according to the following guidelines.

- A score between 0 and 100 will be assigned.
- If the source file(s) are not submitted before the specified deadline's late period ends (48 hours after the deadline) or if they do not compile, then a grade of 0 will be assigned.
- Deductions for late submissions and absences will be deducted in a way consistent with the course syllabus.
- The programs will be evaluated to determine if they output the correct Strings.