Purpose: Provide you with a simple introduction to if statements

Summary: Write a Java program that carries out the computations needed for IRS form 1040EZ.

Details: Attached to this lab is Form 1040EZ. Some items have been crossed out — you don’t have to worry about those. Write a program that prompts the user for the values indicated, then computes and prints the contents of lines 4, 6, 9, 10, and 11a or 12.

Follow the format of the sample output exactly, including all spacing (see below).

In addition, use variable names “line1”, “line2”, etc., for the different values input and computed. This will make it much easier for me to grade the programs (and much easier for you to write it).

Computing Tax
The directions for “line 10” ask you to consult a tax table. Instead, use the following greatly simplified formula:

- if taxable income is greater than $500,000, tax is $0.6 \times \text{(taxable income)}$
- if taxable income is greater than $100,000 and less than or equal to $500,000, tax is $0.5 \times \text{(taxable income)}$
- if taxable income is greater than $50,000 and less than or equal to $100,000, tax is $0.25 \times \text{(taxable income)}$
- otherwise, tax is $0.1 \times \text{(taxable income)}$

Sample Output

```
$ java Lab3
Bob Roos Tue Feb 14 14:30:28 EST 2006
Your name: Tex Evader
Is this a joint return (yes/no)? no
Wages, salaries, tips (line 1): 50000
Interest (line 2): 500
Unemployment compensation (line 3): 0
Adjusted gross income (line 4): $50500.0
```
Your taxable income (line 6) is $42300.0
Tax withheld (line 7): 4000
Earned income credit (line 8a): 200
Your total payments (line 9) are $4200.0
Your tax (line 10) is $4230.0
You owe (line 12) $30.0

accs@ALDENV27 ~/courses/cs111s2006
$ java Lab3
Bob Roos Tue Feb 14 14:30:56 EST 2006
Your name: Tex Evader
Is this a joint return (yes/no)? yes
Spouse’s name: Mary Evader
Wages, salaries, tips (line 1): 60000
Interest (line 2): 1000
Unemployment compensation (line 3): 0
Adjusted gross income (line 4): $61000.0
Your taxable income (line 6) is $44600.0
Tax withheld (line 7): 4000
Earned income credit (line 8a): 200
Your total payments (line 9) are $4200.0
Your tax (line 10) is $4460.0
You owe (line 12) $260.0

Things to Beware Of
Don't declare variables inside the curly braces “{…}” of your if statements. (See instructor.) Declare variables outside the ifs.

Submitting Programs
You will hand in a printed copy of your program (use the a2ps command) and four runs with different sets of data. The first two runs must use the values from the sample output above. The other two runs must cover each the following cases:

• not filing jointly; gets refund
• filing jointly; gets refund

Do all of your four runs in a single typescript session (don’t print out four separate pages of output).

Final Notes
As usual, your program should begin with a Javadoc-style header comment with your name, the lab number, and a description of what the program does, as well as explanatory comments throughout that describe what the variables stand for and that summarize what’s going on. Your program should be properly indented (use the “arrow” and “TAB” method to align things) and should not contain any wrapped lines. Use blank lines to break the program up into logical sections.

Checklist:
☐ All requirements met as described above (output exactly matches sample output, four test cases, etc.)

☐ Javadoc-style header comments with the assignment number, your name, your section, and a description of the program; comments throughout describing variables and explaining program; correctly indented code; no wrapped lines

☐ Hard copy (printed using a2ps) of program

☐ Hard copy (printed using a2ps) of four outputs