Option #1

Pseudocode:

Class Module3

  Method main(arguments)
    PROMPT user to enter weekly income
    READ weeklyIncome

    IF weeklyIncome < 500 THEN
      taxRate = 0.10
    ELSE IF weeklyIncome < 1500 THEN
      taxRate = 0.15
    ELSE IF weeklyIncome < 2500 THEN
      taxRate = 0.20
    ELSE
      taxRate = 0.30

    taxWithholdings = weeklyIncome * taxRate

    OUTPUT "Weekly income: " + weeklyIncome
    OUTPUT "Tax rate: " + taxRate
    OUTPUT "Tax withholdings: " + taxWithholdings

Source Code:

```java
import java.util.Scanner;

public class Module3 {
    public static void main(String[] args) {
        Scanner scnr = new Scanner(System.in);
        double weeklyIncome;
        double taxRate;
        double taxWithholdings;

        System.out.println("Enter your weekly income:");
        weeklyIncome = scnr.nextDouble();

        if (weeklyIncome < 500) {
            taxRate = 0.10;
        } else if (weeklyIncome < 1500) {
            taxRate = 0.15;
        } else if (weeklyIncome < 2500) {
            taxRate = 0.20;
```

```
    } else {
        taxRate = 0.30;
    }

    taxWithholdings = weeklyIncome * taxRate;
    System.out.println("Weekly income: " + weeklyIncome);
    System.out.println("Tax rate: " + taxRate);
    System.out.println("Tax withholdings: " + taxWithholdings);
  }

}
```

Screenshot of application execution:

Git Repository

https://github.com/ac-potts/CS320_CritThinking/tree/main/Module3