1. **Inputs and Outputs**

Inputs: First name, last name, salary(for salary employees), hourly wage (for hourly employees), hours worked (for hourly employees)

Outputs: Gross pay, Fica tax, State tax, Federal tax, Net pay

1. **Logical order of outputs**
2. Gross pay
3. Fica tax
4. State tax
5. Federal tax
6. Net Pay

I don’t believe the order of outputs matters outside of gross pay being first and net pay being last, as all taxes are calculated based on gross pay.

3. **Logic to solve each output**

**Gross weekly pay:**

For salaried employees: divide salary by 52 for 52 weeks in a year

Salary / 52

**For Hourly employees:**

Calculate any overtime pay: OvertimeHourly being = 1.5

If HoursWorked > 40 Then

OvertimePay = (HoursWorked - 40) \* (HourlyWage \* OvertimeHourly )

Else

dblOvertimePay = 0

Determine Pay without any overtime:

If Hoursworked >= 40 Then

Pay without any overtime = (40 \* HourlyWage)

Else

Pay without any overtime = HourlyWage \* Hoursworked

Weekly gross pay = Pay without any overtime + Overtime Pay (will be 0 if not applicable)

Fica tax: Same for both

Gross weekly pay \* .076

State tax:

If radio button Ohio is checked then State tax = Weekly gross \* .065

If radio button Kentucky is checked then State tax = Weekly gross \* .06

If radio button Indiana is checked then State tax = weekly gross \* .055

Federal tax: Same for both

If WeeklyGrossPay < 50 Then

Federal tax = 0

Else

If WeeklyGrossPay > 50 And WeeklyGrossPay <= 500 Then

Federal tax = (WeeklyGrossPay - 51) \* .1

Else

If WeeklyGrossPay > 500 And WeeklyGrossPay <= 2500 Then

Federal tax = ((WeeklyGrossPay - 500) \* .15 ) + 45

Else

If WeeklyGrossPay > 2500 And WeeklyGrossPay <= 5000 Then

Federal tax = ((WeeklyGrossPay - 2500) \* .2) + 345

Else

Federal tax = ((WeeklyGrossPay - 5000) \* .25) + 845

End If

Net pay: same for both

Net pay = Weekly gross pay - Fica tax - State tax - Federal tax

**Data types:**

Net pay- double

First name-String

Last name-String

Gross weekly pay-double

Overtime pay- double

Fica tax- Double

Fed tax- Double

* 0 to 50 fed tax- double
* 51 to 500 fed tax-double
* 501-2500 fed tax- double
* 2501-5000 fed tax - double
* 5001 + fed tax - double

State tax- Double

-Ohio state tax-double

-Kentucky state tax-double

-Indiana state tax- double

Hourly wage-double

Hours worked- double

Forty hour pay-double

Salary-double

Weeks-double

Test cases

Salary test cases:

#1

First name: Alek

Last name: Chrismer

Salary: $52,000

State tax option: Ohio

Results:

Gross pay: $1000

Fica tax: $76

State tax: $65

Fed tax: $120

Net pay: $739

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First name: Rob

Last name: Hammill

Salary: $100,000

State tax option: Kentucky

Results:

Gross pay: $1923.08

Fica tax:$146.15

State tax: $115.38

Fed tax: $258.46

Net pay: $1403.08

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- The labels of listbox are off here, Wasn’t sure how to align them differently for them to work for each output-They are perfectly aligned with other inputted results

First name: Eric

Last name: Barton

Salary: $25,000

State tax option: Indiana

Results:

Gross pay: $480.77

Fica tax: $36.54

State tax: $26.44

Fed tax: $42.98

Net pay: $374.81

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First name: Serena

Last name: Williams

Salary: $300,000

State tax option: Ohio

Results:

Gross pay: $5769.23

Fica tax: $438.46

State tax: $375

Fed tax: $1037.31

Net pay: $3918.46

Hourly test cases:

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First name: Tom

Last name: Stone

Hours worked: 4

Hourly wage: $10

State tax option: Ohio

Results:

Gross pay: $40

Fica tax: $3.04

State tax: $2.60

Fed tax: 0

Net pay: $34.36

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First name: Julio

Last name: Jones

Hours worked: 45

Hourly wage: $10

State tax option: Kentucky

Results:

Gross pay: $475

Fica tax: $36.10

State tax: $28.50

Fed tax: $42.40

Net pay: $368

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First name: Joe

Last name: Burrow

Hours worked: 55

Hourly wage :$50

State tax option: Indiana

Results:

Gross pay: $3125.00

Fica tax: $237.50

State tax:$171.88

Fed tax: $470

Net pay: $2245.63