

### Lab 3 Pseudocode

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Import java.util.Scanner

public class CalculateTaxes

public static void main(string[] args)

Scanner in -> new Scanner(System.in)

Print "Are you a single filer or a married joint filer (enter 's' or 'j'):"

String inputStatus -> in.next()

Print "Enter an estimate of your earned income for 2022:"

double inputIncome -> in.next()


//single tax amount
double singleTenPercent -> inputIncome * 0.10
double singleTwelvePercent -> (inputIncome-10275) * 0.12 + singleTenPercent
double singleTwentyTwoPercent -> (inputIncome-41775) * 0.22 + singleTwelvePercent
double singleTwentyFourPercent -> (inputIncome-89075) * 0.24 + singleTwentyTwoPercent
double singleThirtyTwoPercent -> (inputIncome-170050) * 0.32 + singleTwentyFourPercent
double singleThirtyFivePercent -> (inputIncome-215950) * 0.35 + singleThirtyTwoPercent
double singleThirtySevenPercent -> (inputIncome-539900) * 0.37 + singleThirtyFivePercent
//married tax amount
double marriedTenPercent -> inputIncome * 0.10
double marriedTwelvePercent -> (inputIncome-20550) * 0.12 + marriedTenPercent
double marriedTwentyTwoPercent -> (inputIncome-83550) * 0.22 + marriedTwelvePercent
double marriedTwentyFourPercent -> (inputIncome-178150) * 0.24 + marriedTwentyTwoPercent
double marriedThirtyTwoPercent -> (inputIncome-340100) * 0.32 + marriedTwentyFourPercent
double marriedThirtyFivePercent -> (inputIncome-432900) * 0.35 + marriedThirtyTwoPercent
double marriedThirtySevenPercent -> (inputIncome-647850) * 0.37 +
    marriedThirtyFivePercent
//Single tax rate
double singleTenTaxRate -> singleTenPercent/inputIncome *100
double singleTwelveTaxRate -> singleTwelvePercent/inputIncome *100
double singleTwentyTwoTaxRate -> singleTwentyTwoPercent/inputIncome *100
double singleTwentyFourTaxRate -> singleTwentyFourPercent/inputIncome *100
double singleThirtyTwoTaxRate -> singleThirtyTwoPercent/inputIncome *100
double singleThirtyFiveTaxRate -> singleThirtyFivePercent/inputIncome *100
double singleThirtySevenTaxRate -> singleThirtySevenPercent/inputIncome *100
//Married tax rate
double marriedTenTaxRate -> singleTenPercent/inputIncome *100
double marriedTwelveTaxRate -> singleTwelvePercent/inputIncome *100
double marriedTwentyTwoTaxRate -> singleTwentyTwoPercent/inputIncome *100
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double marriedTwentyFourTaxRate -> singleTwentyFourPercent/inputIncome *100
double marriedThirtyTwoTaxRate -> singleThirtyTwoPercent/inputIncome *100
double marriedThirtyFiveTaxRate -> singleThirtyFivePercent/inputIncome *100
double marriedThirtySevenTaxRate -> singleThirtySevenPercent/inputIncome *100
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if inputStatus -> 's'
    if inputIncome >= 0 and inputIncome <= 10275
        printf "Your estimated taxes for 2023 are: $%.2f\n", singleTenPercent
        printf "This result in an %.1f%% effective tax rate .%n",
singleTenTaxRate
    else if inputIncome >= 10276 and inputIncome <= 41775
        printf "Your estimated taxes for 2023 are: $%.2f\n", singleTwelvePercent
        printf "This result in an %.1f%% effective tax rate .%n",
singleTwelveTaxRate
    else if inputIncome >= 41776 and inputIncome <= 89075
        printf "Your estimated taxes for 2023 are: $%.2f\n",
singleTwentyTwoPercent
        printf "This result in an %.1f%% effective tax rate .%n",
singleTwentyTwoTaxRate
    else if inputIncome >= 89076 and inputIncome <= 170050
        printf "Your estimated taxes for 2023 are: $%.2f\n",
singleTwentyFourPercent
        printf "This result in an %.1f%% effective tax rate .%n",
singleTwentyFourTaxRate
    else if inputIncome >= 170051 and inputIncome <= 215950
        printf "Your estimated taxes for 2023 are: $%.2f\n",
singleThirtyTwoPercent
        printf "This result in an %.1f%% effective tax rate .%n",
singleThirtyTwoTaxRate
    else if inputIncome >= 215951 and inputIncome <= 539900
        printf "Your estimated taxes for 2023 are: $%.2f\n",
singleThirtyFivePercent
        printf "This result in an %.1f%% effective tax rate .%n",
singleThirtyFiveTaxRate
    else if inputIncome >= 539901
        printf "Your estimated taxes for 2023 are: $%.2f\n",
singleThirtySevenPercent
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        printf "This result in an %.1f%% effective tax rate .%n",
singleThirtySevenTaxRate

else if inputStatus -> 'j'
    if inputIncome >= 0 and inputIncome <= 20550
        printf "Your estimated taxes for 2023 are: $%.2f%n", marriedTenPercent
        printf "This result in an %.1f%% effective tax rate .%n",
marriedTenTaxRate
    else if inputIncome >= 10276 and inputIncome <= 83550
        printf "Your estimated taxes for 2023 are: $%.2f%n",
marriedTwelvePercent
        printf "This result in an %.1f%% effective tax rate .%n",
marriedTwelveTaxRate
    else if inputIncome >= 41776 and inputIncome <= 178150
        printf "Your estimated taxes for 2023 are: $%.2f%n",
marriedTwentyTwoPercent
        printf "This result in an %.1f%% effective tax rate .%n",
marriedTwentyTwoTaxRate
    else if inputIncome >= 89076 and inputIncome <= 340100
        printf "Your estimated taxes for 2023 are: $%.2f%n",
marriedTwentyFourPercent
        printf "This result in an %.1f%% effective tax rate .%n",
marriedTwentyFourTaxRate
    else if inputIncome >= 170051 and inputIncome <= 431900
        printf "Your estimated taxes for 2023 are: $%.2f%n",
marriedThirtyTwoPercent
        printf "This result in an %.1f%% effective tax rate .%n",
marriedThirtyTwoTaxRate
    else if inputIncome >= 215951 and inputIncome <= 647850
        printf "Your estimated taxes for 2023 are: $%.2f%n",
marriedThirtyFivePercent
        printf "This result in an %.1f%% effective tax rate .%n",
marriedThirtyFiveTaxRate
    else if inputIncome >= 647851
        printf "Your estimated taxes for 2023 are: $%.2f%n",
marriedThirtySevenPercent
        printf "This result in an %.1f%% effective tax rate .%n",
marriedThirtySevenTaxRate

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else
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    print "This is not a valid input"
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