

Payroll

April 22, 2025

```
[ ]: # Import the clear output fuction
from IPython.display import clear_output

# Create the main menu
#####
def main():

    while True:

        print("          Welcome to the payroll calculator")

        print(" ")

        print("          What do you want to do?")

        print(" ")

        print("#####")

        print(" ")

        print("          1. Calculate pay")

        print(" ")

        print("          2. Leave")

        print(" ")

        print("#####")
#####
↵
```

```

# Start the main menu
menuchoice()

# Break the loop
break

# Create the menu choices
#####
def menuchoice():

    choice = input("Enter 1 or 2: ")

    # If the answer is yes, clear the previous output and start the calculator
    if choice == "1":
        clear_output()
        calculatepay()

    # If the answer is no, clear the previous output and display a thank you
    ↪message
    elif choice == "2":
        clear_output()
        print("Okay, have a good day!")

    # If the answer is neither, display error message and restart
    else:
        clear_output()
        print("Invalid choice. Please enter 1 or 2.")
        menuchoice()

# Create the calculator function
def calculatepay():

    print("I will calculate your pay")

    input("Press Enter to continue...")

# Clear the output
clear_output()
#####

```

```

# Set the variables
#####
    FirstName = input("What Is Your First Name?:")

    LastName = input("What Is Your Last Name?:")

    PayRate = float(input("What Is Your Hourly Pay?:"))

    Hours = float(input("How Many Hours Did You Work This Week?:"))

    FedTaxRate = .101

    StateTaxRate = .0447

    SocialSecurity = 162.00
#####
↪

# Create the overtime equation
#####
    if Hours > 40:
        BasePay = PayRate * 40

        OverHours = Hours - 40

        OverTime = (PayRate * 1.5) * OverHours

        GrossPay = BasePay + OverTime

        FedTaxRate = GrossPay * FedTaxRate

        GrossPay = GrossPay - FedTaxRate

        StateTaxRate = StateTaxRate * GrossPay

        GrossPay = GrossPay - StateTaxRate

        GrossPay = GrossPay - SocialSecurity
#####
↪

```

```

#Clear the previous outputs and display the outcome
#####

    clear_output()

    ↵
    ↪print("#####")

    print(" ")

    print("      Hello", FirstName, LastName, ", Your weekly pay should be",
    ↪${:,.2f}".format(GrossPay))

    print(" ")

    ↵
    ↪print("#####")
#####

# Start the loop function
loop()

# If the number of hours worked is 0, have the outcome be $0.00 and display it
#####
    if Hours == 0:

        GrossPay = 0.00

        clear_output()

        ↵
        ↪print("#####")

        print(" ")

        print("      Hello", FirstName, LastName, ", Your weekly pay should be",
        ↪${:,.2f}".format(GrossPay))

        print(" ")

        ↵
        ↪print("#####")
#####

```

```

# Start the loop funtion
loop()

# create the equation for under 40 hours
#####
else:

    GrossPay = Hours * PayRate

    FedTaxRate = GrossPay * FedTaxRate

    GrossPay = GrossPay - FedTaxRate

    StateTaxRate = StateTaxRate * GrossPay

    GrossPay = GrossPay - StateTaxRate

    GrossPay = GrossPay - SocialSecurity

    OverTime = 0.0
#####
↳

#Clear the previous outputs and display the outcome
#####
clear_output()

↳ print("#####")

    print(" ")

    print("      Hello", FirstName, LastName, ", Your weekly pay should be",
↳ ${:,.2f}".format(GrossPay))

    print(" ")

↳ print("#####")

```

```
#####

# Start the loop funtion
loop()

# Create the loop that will give you the option to restart
def loop():

    # Ask the user if they want to run the program again
    again = input("Would you like to run again? (y/n)")

    # If the answer is yes, clear the previous output and restart
    if again in ["yes", "y", "Yes", "Y", "YES", "yEs", "yeS", "YEs", "yES", ↵
↵"yea"]]:
        clear_output()
        main()

    # If the answer is no, clear the previous output and display a thank you ↵
↵message
    if again in ["no", "n", "No", "N", "NO", "nO", "nah"]]:
        clear_output()
        print("Thank you for using Wage Calculator")

    # If the answer is neither, display error message and restart
    else:
        clear_output()
        print("Please answer with 'yes' or 'no'.")
        loop()
# Start the main funtion
main()
```

Welcome to the payroll calculator

What do you want to do?

#####

1. Calculate pay

2. Leave

#####

[]: