In [1]:
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# Practice 3: Uses user input
# Step 1: Calculate bi-weekly payments
def biweekly(hours, rate):
    # Calculate regular and overtime hours
    regular = min(hours, 80)
    overtime = max(hours - 80, 0)

    # Calculate regular rate, overtime rate, and total pay
    regular_pay = regular * rate
    overtime_pay = overtime * rate * 1.5  # Overtime rate is 1.5 times the reg
    total_pay = regular_pay + overtime_pay

    # Return regular pay, overtime pay, and total pay
    return regular_pay, overtime_pay, total_pay

# Step 2: Deductions
# Calculate deductions such as union fees, federal tax, retirement, state tax,
def calculate_deductions(total_pay, union_status, rate):
    # Union fees calculation
    union_fee = 0.01 * total_pay if union_status == "Y" else 0

    # Calculate federal tax based on total bi-weekly income
    annual_income = total_pay * 26  # Convert bi-weekly income to annual incom

    if annual_income <= 11600:
        federal_tax_amount = 0.10 * total_pay
    elif 11601 <= annual_income <= 47150:
        federal_tax_amount = (11600 * 0.10) + ((annual_income - 11600) * 0.12)
    elif 47151 <= annual_income <= 100525:
        federal_tax_amount = (11600 * 0.10) + ((47150 - 11600) * 0.12) + ((ann
    elif 100526 <= annual_income <= 191950:
        federal_tax_amount = (11600 * 0.10) + ((47150 - 11600) * 0.12) + ((100

    # Retirement, state tax, social security, and medicaid calculations
    annual_salary = rate * 80 * 26  # Assuming 80 hours of regular pay per bi-
    retirement = 0.045 * total_pay
    state_tax = 0.06 * total_pay
    social_security = min(10453.20, 0.062 * total_pay) if annual_salary >= 168
    medicaid = 0.0145 * total_pay if total_pay <= 200000 else 0.0145 * total_p

    # Total deductions calculation
    total_deduction = union_fee + federal_tax_amount + retirement + state_tax

    return union_fee, federal_tax_amount, retirement, state_tax, social_securi

# Step 3: Calculate net pay
def net_pay(annual_income, total_deductions):
    # Calculate net pay after deductions
    net_pay = annual_income - total_deductions
    return round(net_pay, 2)

# Asks user to input hours worked for one week, rate, and their union status
hours = float(input("Please insert hours worked this week: ")) * 2  # Multiply
rate = float(input("Please insert hourly rate: "))
union_status = input("Are you in a union? Type Y for yes and N for no: ")
name = input("Please type your name: ")
employee_id = input("Please type your employee ID: ")
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# Calculate bi-weekly payments and unpack the returned values
regular_pay, overtime_pay, total_pay = biweekly(hours, rate)

# Calculate total deductions
union_fee, federal_tax, retirement, state_tax, social_security, medicaid, tota

# Calculate bi-weekly payments and unpack the returned values
regular_pay, overtime_pay, total_pay = biweekly(hours, rate)

# Calculate total deductions
union_fee, federal_tax, retirement, state_tax, social_security, medicaid, tota

# Calculate annual income
annual_income = total_pay * 26  # Assuming 26 pay periods in a year

# Calculate net pay after deductions
net_pay_amount = net_pay(annual_income, total_deduction)

# Print results
print(f"\nEmployee ID: {employee_id}")
print(f"Name: {name}\n")
print("Wage total:")
print(f"Regular pay: ${round(regular_pay, 2)}")
print(f"Overtime pay: ${round(overtime_pay, 2)}")
print(f"Total pay: ${round(total_pay, 2)}\n")
print("Deductions:")
print(f"Union fees: ${round(union_fee, 2)}")
print(f"Federal tax: ${round(federal_tax, 2)}")
print(f"Retirement fund: ${round(retirement, 2)}")
print(f"State taxes: ${round(state_tax, 2)}")
print(f"Social Security: ${round(social_security, 2)}")
print(f"Medicaid: ${round(medicaid, 2)}")
print(f"The total deductions amount is: ${round(total_deduction, 2)}\n")
print("Net pay:")
print(f"Your net pay is: ${net_pay_amount}")
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Please insert hours worked this week: 50
Please insert hourly rate: 14
Are you in a union? Type Y for yes and N for no: Y
Please type your name: Rachael Laurent
Please type your employee ID: RL109960

Employee ID: RL109960
Name: Rachael Laurent

Wage total:
Regular pay: $1120.0
Overtime pay: $420.0
Total pay: $1540.0

Deductions:
Union fees: $15.4
Federal tax: $4572.8
Retirement fund: $69.3
State taxes: $92.4
Social Security: $95.48
Medicaid: $22.33
The total deductions amount is: $4867.71

Net pay:
Your net pay is: $35172.29
```