# Mauricio A. Molina Jr

# CS 1400

# Assn 6 part 2

'''

Requirement Specifications:

prompt user to input name, hours worked, hourly pay rate, federal tax withholding rate,

state tax withholding rate.

System Analysis:

The program will compute pay, deductions, and output the net pay using the basic operatiors

\* , + , - . No special formulas were needed.

System Design:

a) prompt the user to enter name.

b) prompt the user to enter hours worked.

c) prompt the user to enter hourly pay rate.

d) prompt the user to enter federal tax withholding rate.

e) prompt the user to enter state tax withholding rate.

Implementation:

Testing:

test1-

a) I will enter Mauricio Molina for name, hours worked: 40, hourly pay rate: 12.75,

federal withholding rate: 0.11 and state withholding rate: 0.07

b) The output will be:

MAURICIO MOLINA PAY INFORMATION

Pay

Hours Worked: 40

Pay Rate: $ 12.75

Gross Pay: $ 510.00

Deductions

Federal Withholding (11.0%) : $ 56.10

State Withholding (7.0%) : $ 35.70

Total Deduction: $ 91.80

Net Pay: $ 418.20

test2-

a) I will enter Mauricio Molina for name, hours worked: 80 , hourly pay rate: 23.90,

federal withholding rate: 0.15 and state withholding: 0.08

b) The output will be:

MAURICIO MOLINA PAY INFORMATION

Pay

Hours Worked: 80

Pay Rate: $ 23.90

Gross Pay: $ 1912.00

Deductions

Federal Withholding (15.0%) : $ 286.80

State Withholding (8.0%) : $ 152.96

Total Deduction: $ 439.76

Net Pay: $ 1472.24

Troubleshooting: I had problems with the parentheses that went around the percentages of both the

Federal withholding and state withholding strings. I was trying to make the parentheses their own string

but it was leaving spaces in between the the percentage and both opening and closing parentheses e.g. ( 0.12 ) v.s

(0.12). I fixed this by using the + operator to concatenate my strings which got rid of the space the , was leaving.

The + operator also helped with the concatenation of all of my strings when I found out we could only have one

print statement for this assignment.

'''

name = str.upper(input("Enter employee's name: "))

hoursWorked = int(input("Enter number of hours worked in a week: "))

payRate = float(input("Enter hourly pay rate: ","10.2f"))

fedTax = float(input("Enter federal tax withholding rate (ex. 0.12): "))

stateTax = float(input("Enter state tax withholding rate (ex. 0.06): "))

grossPay = hoursWorked \* payRate

totalDeduction = grossPay \* (fedTax + stateTax)

output = "\n" + format(name, ">21") + " " + format("PAY INFORMATION", "<21") + "\n"

output += "\n" + format("Pay", ">26") + "\n"

output += (format("Hours Worked:", ">34") + format(hoursWorked, ">16")) + "\n"

output += (format("Pay Rate: $", ">36") + format(payRate, ">14.2f")) + "\n"

output += (format("Gross Pay: $", ">36") + format(grossPay, ">14.2f")) + "\n"

output += "\n" + format("Deductions", ">30") + "\n"

ft = format(fedTax, ".1%")

st = format(stateTax, ".1%")

output += format("Federal Withholding (", ">26") + ft + ")" + format(": $", ">4") + format(grossPay \* fedTax, ">-14.2f") + "\n"

output += format("State Withholding (", ">27") + st + ") : $" + format(grossPay \* stateTax, ">-14.2f") + "\n"

output += format("Total Deduction", ">33") + ": $" + format(totalDeduction, ">-14.2f") + "\n"

output += "\n" + format("Net Pay: $", ">36") + format(grossPay - totalDeduction, ">-14.2f")

print(output)