Assignment Chapter 5 Randall Fishwick

CO SCI 124

Python Programming

# Paint Job Estimator

# A painting company has determined that for every 112 square feet of wall space,

# one gallon of paint and eight hours of labor will be required.

# The company charges $35.00 per hour for labor.

#

# Write a program that asks the user to enter the square feet

# of wall space to be painted and the price of the paint per gallon.

#

# The program should display the following data:

# The number of gallons of paint required

# The hours of labor required

# The cost of the paint

# The labor charge

# The total cost of the paint job

# Global constants

FEET\_PER\_GALLON = 112

HRS\_PER\_GALLON = 8

HR\_RATE = 35.00

# main module

def main():

# Local variables

square\_feet = 0.0

price\_per\_gal = 0.0

square\_feet = float(input('Enter square feet to paint: '))

price\_per\_gal = float(input("Enter paint price per gallon: "))

calc\_n\_display(square\_feet, price\_per\_gal)

def calc\_n\_display(sq\_ft, pr\_per\_gal):

# Local variables

gallons\_rqd = 0.0

labor\_hrs = 0.0

paint\_cost = 0.0

labor\_cost = 0.0

total\_cost = 0.0

gallons\_rqd = sq\_ft / FEET\_PER\_GALLON

labor\_hrs = gallons\_rqd \* HRS\_PER\_GALLON

paint\_cost = gallons\_rqd \* pr\_per\_gal

labor\_cost = labor\_hrs \* HR\_RATE

total\_cost = labor\_cost + paint\_cost

print("\nPaint gallons required:", format(gallons\_rqd, ',.2f'))

print("Labor hours:", format(labor\_hrs, ',.2f'))

print("Paint cost: $", format(paint\_cost, ',.2f'), sep='')

print("Labor cost: $", format(labor\_cost, ',.2f'), sep='')

print("Total cost: $", format(total\_cost, ',.2f'), sep='')

# Call the main function.

main()

