Task 1: Grocery Shopping:

# Initialize variables

apple\_price = 2.5

banana\_price = 1.2

apple\_count = 10

banana\_count = 8

# Calculate total cost

total\_cost = (apple\_price \* apple\_count) + (banana\_price \* banana\_count)

# Print the output

print("The total cost for apples and bananas is $", total\_cost)

Task 2: Monthly Budget Calculation

# Initialize variables

rent = 1200

utilities = 300

groceries = 400

transportation = 150

# Calculate total monthly expenses

total\_expenses = rent + utilities + groceries + transportation

# Print the output

print("Total monthly expenses are $", total\_expenses)

Task 3: Loan Interest Calculation

# Initialize variables

principal\_amount = 5000

annual\_interest\_rate = 5

years = 3

# Calculate simple interest

interest = (principal\_amount \* annual\_interest\_rate \* years) / 100

# Print the output

print("The interest on the loan is $", interest)

Task 4: Travel Distance Calculation

# Initialize variables

speed = 60 # in miles per hour

time = 5 # in hours

# Calculate distance

distance = speed \* time

# Print the output

print("The total travel distance is", distance, "miles")

Task 5: Restaurant Bill Calculation

# Initialize variables

meal\_cost = 50

tax\_rate = 0.08

tip\_rate = 0.15

# Calculate total bill

tax\_amount = meal\_cost \* tax\_rate

tip\_amount = meal\_cost \* tip\_rate

total\_bill = meal\_cost + tax\_amount + tip\_amount

# Print the output

print("The total bill amount is $", total\_bill)

Task 6: Fitness Tracker (Calories Burned)

# Initialize variables

calories\_per\_minute\_running = 10

calories\_per\_minute\_walking = 5

running\_minutes = 30

walking\_minutes = 60

# Calculate total calories burned

total\_calories\_burned = (calories\_per\_minute\_running \* running\_minutes) + (calories\_per\_minute\_walking \* walking\_minutes)

# Print the output

print("Total calories burned:", total\_calories\_burned)

Task 7: Savings Account Balance Calculation

# Initialize variables

initial\_balance = 1000

monthly\_deposit = 200

months = 12

interest\_rate = 0.02

# Calculate final balance

final\_balance = initial\_balance + (monthly\_deposit \* months) + (initial\_balance \* interest\_rate)

# Print the output

print("Final balance after one year:", final\_balance)

Task 8: Trip Cost Split

# Initialize variables

total\_cost = 1500

people = 5

# Calculate cost per person

cost\_per\_person = total\_cost / people

# Print the output

print("Cost per person for the trip is $", cost\_per\_person)

Task 9: Water Consumption Calculation

# Initialize variables

bottle\_volume = 0.5 # in liters

bottles\_per\_day = 8

days = 30

# Calculate total water consumption

total\_water\_consumption = bottle\_volume \* bottles\_per\_day \* days

# Print the output

print("Total water consumption in a month is", total\_water\_consumption, "liters")

Task 10: Electricity Bill Calculation

# Initialize variables

units\_consumed = 350

rate\_per\_unit = 0.12

# Calculate total electricity bill

total\_bill = units\_consumed \* rate\_per\_unit

# Print the output

print("Total electricity bill is $", total\_bill)