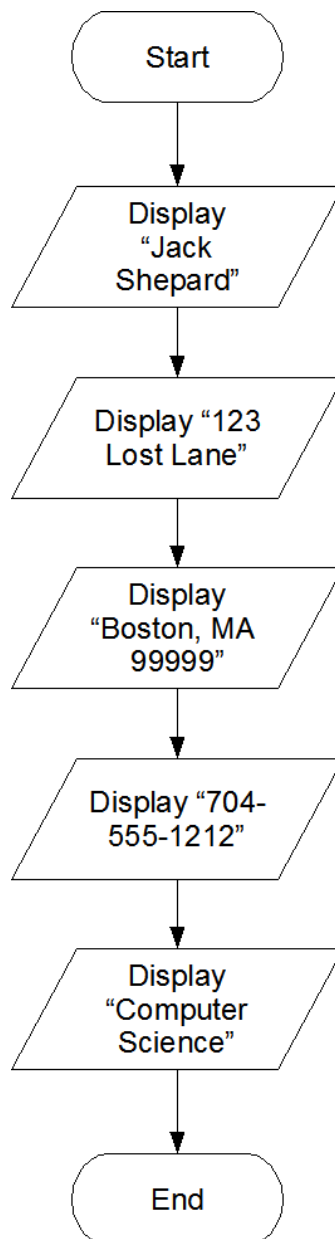


Programming Exercise 2-1

```
print ("Jack Shepard")
print ("123 Lost Lane")
print ("Boston, MA 99999")
print ("704-555-1212")
print ("Computer Science")
```



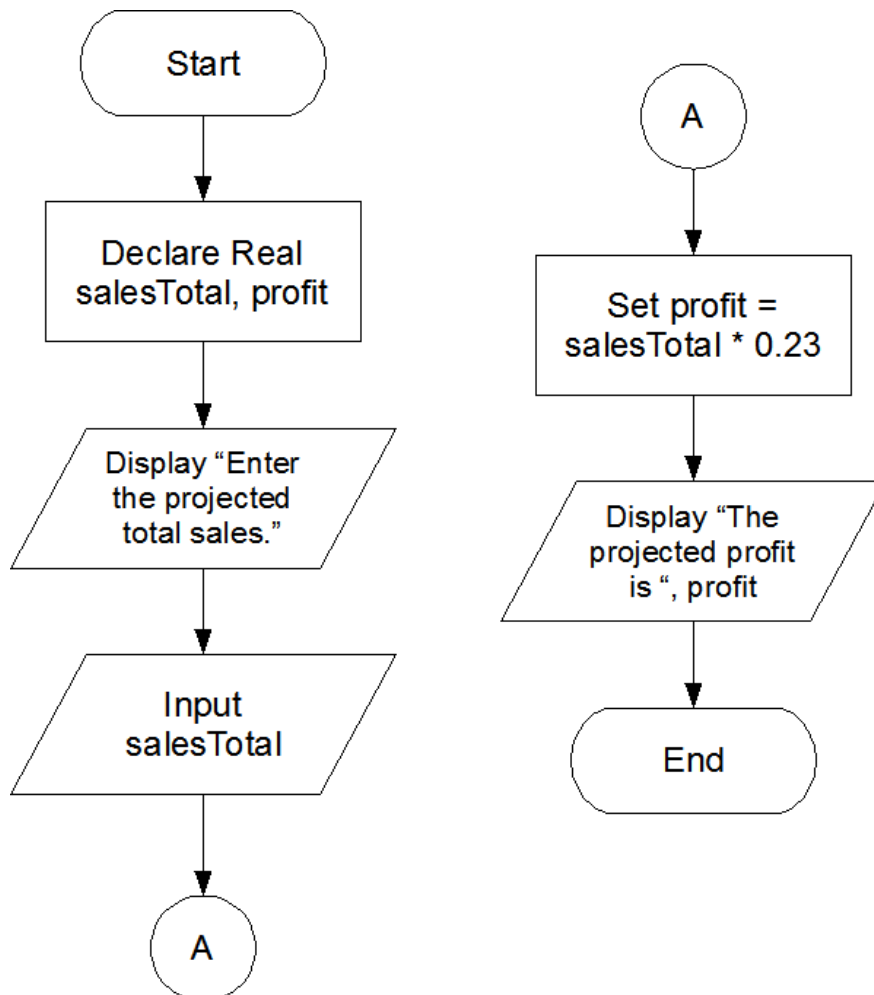
Programming Exercise 2-2

```
# Variables to hold the sales total and the profit
salesTotal = 0.0
profit = 0.0

# Get the amount of projected sales.
salesTotal = float(input("Enter the projected sales: "))

# Calculate the projected profit.
profit = salesTotal * 0.23

# Print the projected profit.
print ("The projected profit is ", format(profit, '.2f'))
```



Programming Exercise 2-3

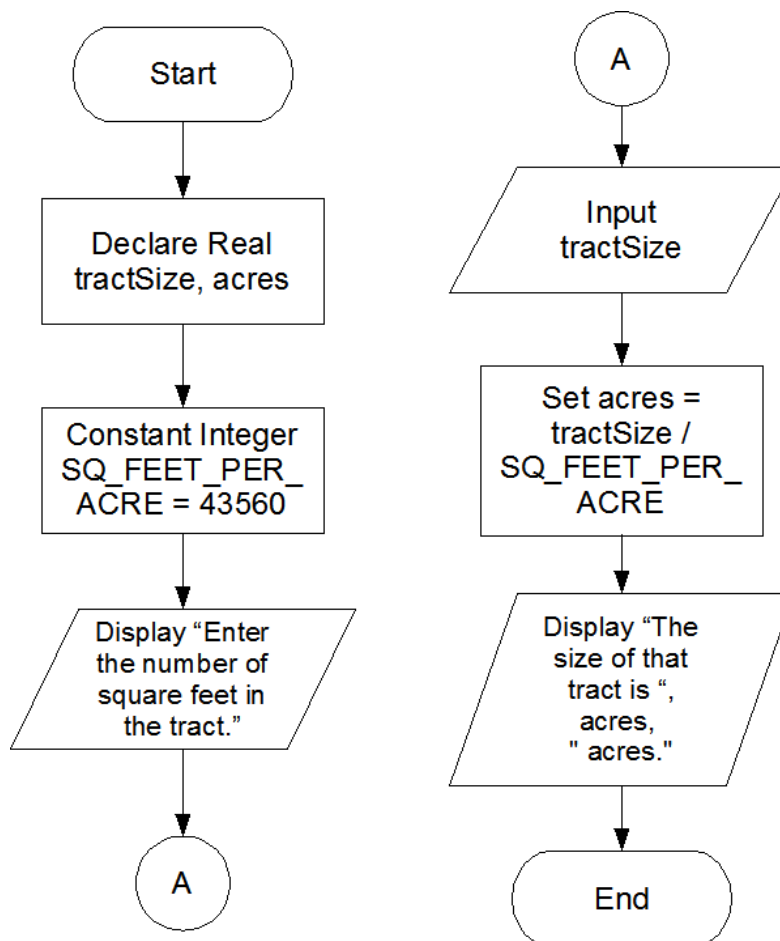
```
# Variables to hold the size of the tract and number of acres.
tractSize = 0.0
acres = 0.0

# Constant for the number of square feet in an acre.
SQ_FEET_PER_ACRE = 43560

# Get the square feet in the tract.
tractSize = input("Enter the number of square feet in the tract.")

# Calculate the acreage.
acres = float(tractSize) / SQ_FEET_PER_ACRE

# Print the number of acres.
print ("The size of that tract is", format(acres, '.2f'), "acres.")
```



Programming Exercise 2-10

```
# Named constants
COMMISSION_RATE = 0.02
NUM_SHARES = 1000
PURCHASE_PRICE = 32.87
SELLING_PRICE = 33.92

# Variables
amountPaidForStock = 0.0 # Amount paid for the stock
purchaseCommission = 0.0 # Commission paid to purchase stock
totalPaid = 0.0          # Total amount paid
stockSoldFor = 0.0       # Amount stock sold for
sellingCommission = 0.0   # Commission paid to sell stock
totalReceived = 0.0      # Total amount received
profitOrLoss = 0.0       # Amount of profit or loss

# Calculate the amount that Joe paid for the stock, not
# including the commission.
amountPaidForStock = NUM_SHARES * PURCHASE_PRICE

# Calculate the amount of commission that Joe paid his broker
# when he bought the stock.
purchaseCommission = COMMISSION_RATE * amountPaidForStock

# Calculate the total amount that Joe paid, which is the amount
# he paid for the stock plus the commission he paid his broker.
totalPaid = amountPaidForStock + purchaseCommission

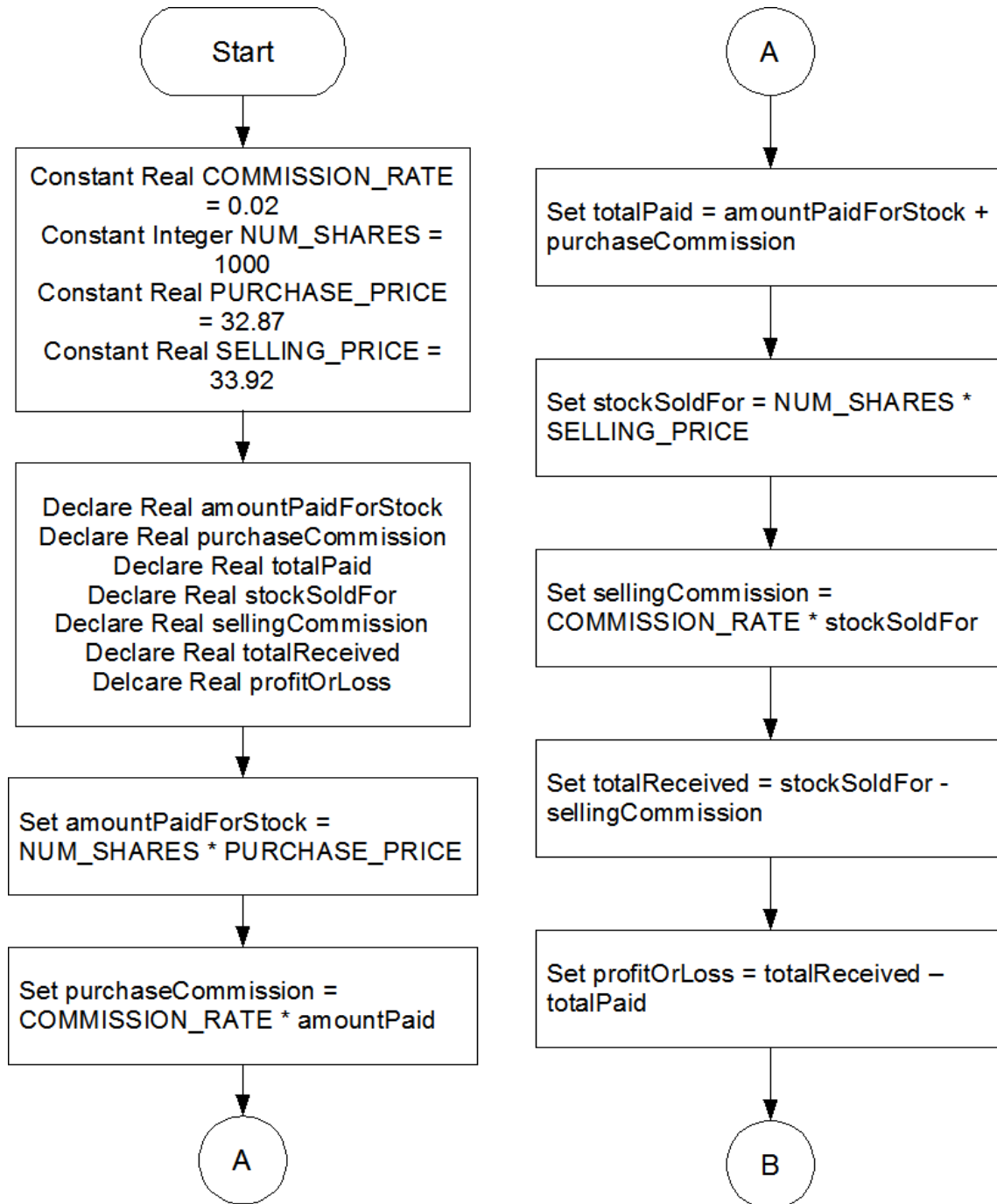
# Calculate the amount that Joe sold the stock for.
stockSoldFor = NUM_SHARES * SELLING_PRICE

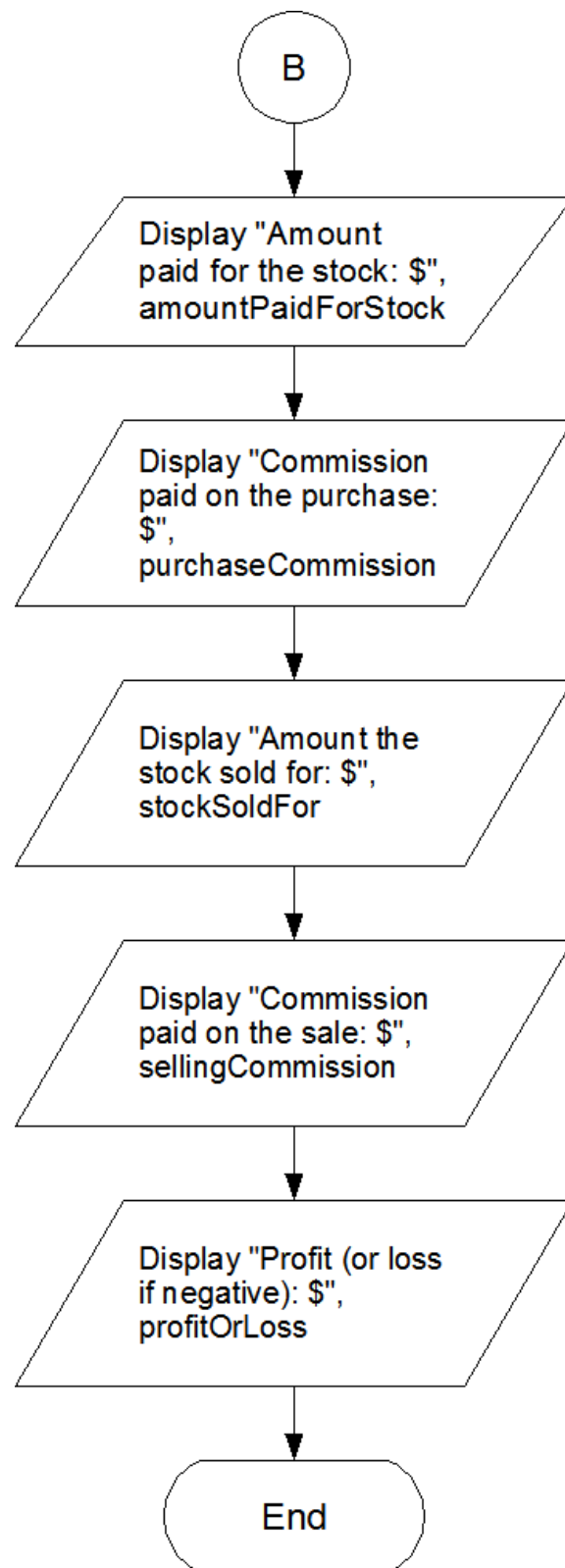
# Calculate the amount of commission that Joe paid his broker
# when he sold the stock.
sellingCommission = COMMISSION_RATE * stockSoldFor

# Calculate the amount of money left over, after Joe paid
# his broker.
totalReceived = stockSoldFor - sellingCommission

# Calculate the amount of profit or loss. If this amount is a
# positive number, it is profit. If this is a negative number it
# is a loss.
profitOrLoss = totalReceived - totalPaid

# Print the required data.
print ("Amount paid for the stock: ", format(amountPaidForStock, '.2f'))
print ("Commission paid on the purchase: ", format(purchaseCommission, '.2f'))
print ("Amount the stock sold for: ", format(stockSoldFor, '.2f'))
print ("Commission paid on the sale: ", format(sellingCommission, '.2f'))
print ("Profit (or loss if negative): ", format(profitOrLoss, '.2f'))
```





Programming Exercise 2-4

```
# Variables to hold the prices of each item, the subtotal,
# and the total.
item1 = 0.0
item2 = 0.0
item3 = 0.0
item4 = 0.0
item5 = 0.0
subtotal = 0.0
tax = 0.0
total = 0.0

# Constant for the sales tax rate.
TAX_RATE = 0.06

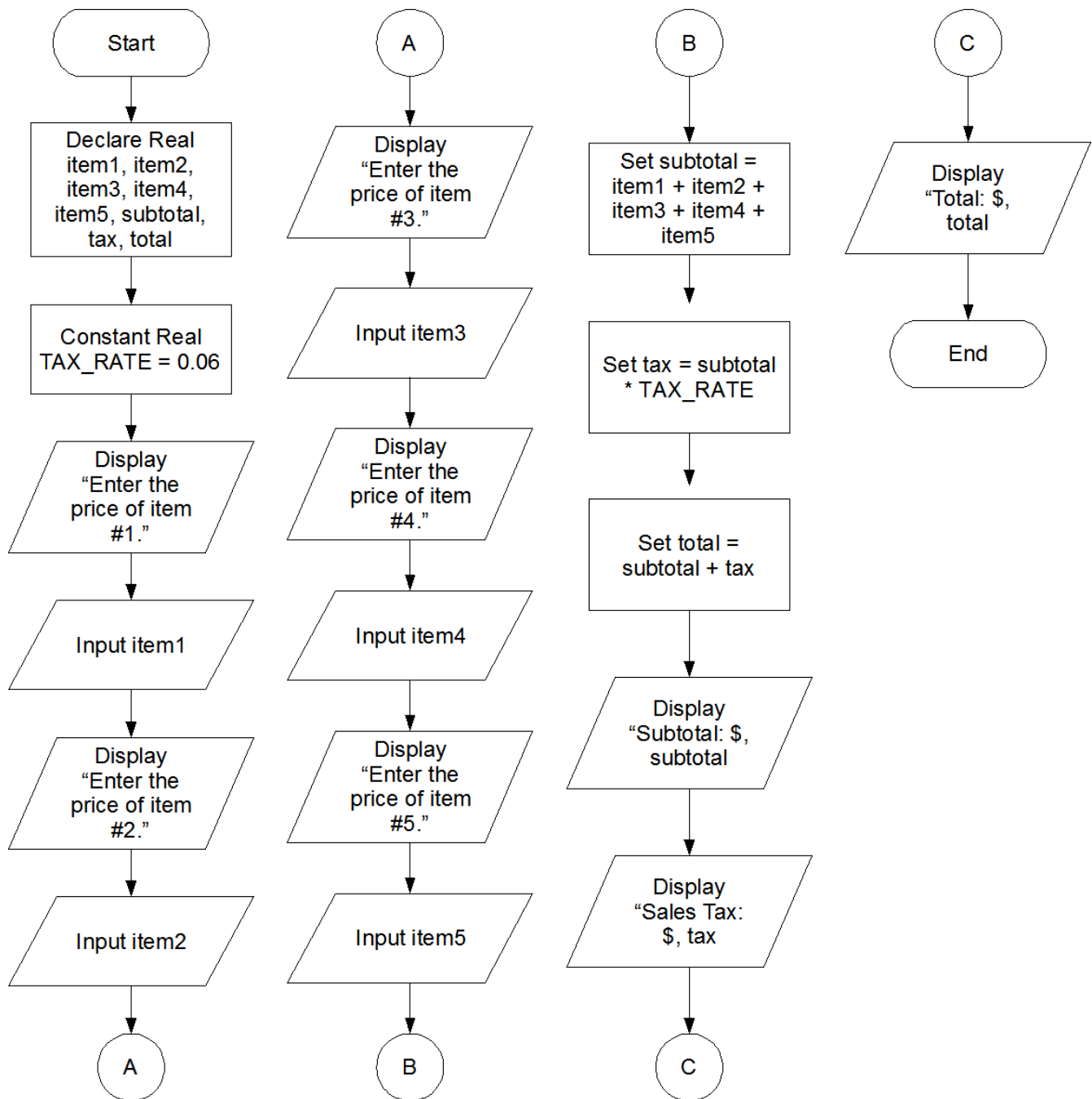
# Get the price of each item.
item1 = float(input("Enter the price of item #1: "))
item2 = float(input("Enter the price of item #2: "))
item3 = float(input("Enter the price of item #3: "))
item4 = float(input("Enter the price of item #4: "))
item5 = float(input("Enter the price of item #5: "))

# Calculate the subtotal.
subtotal = item1 + item2 + item3 + item4 + item5

# Calculate the sales tax.
tax = subtotal * TAX_RATE

# Calculate the total.
total = subtotal + tax

# Print the values.
print ("Subtotal: ", format(subtotal, '.2f'))
print ("Sales Tax: ", format(tax, '.2f'))
print ("Total: ", format(total, '.2f'))
```



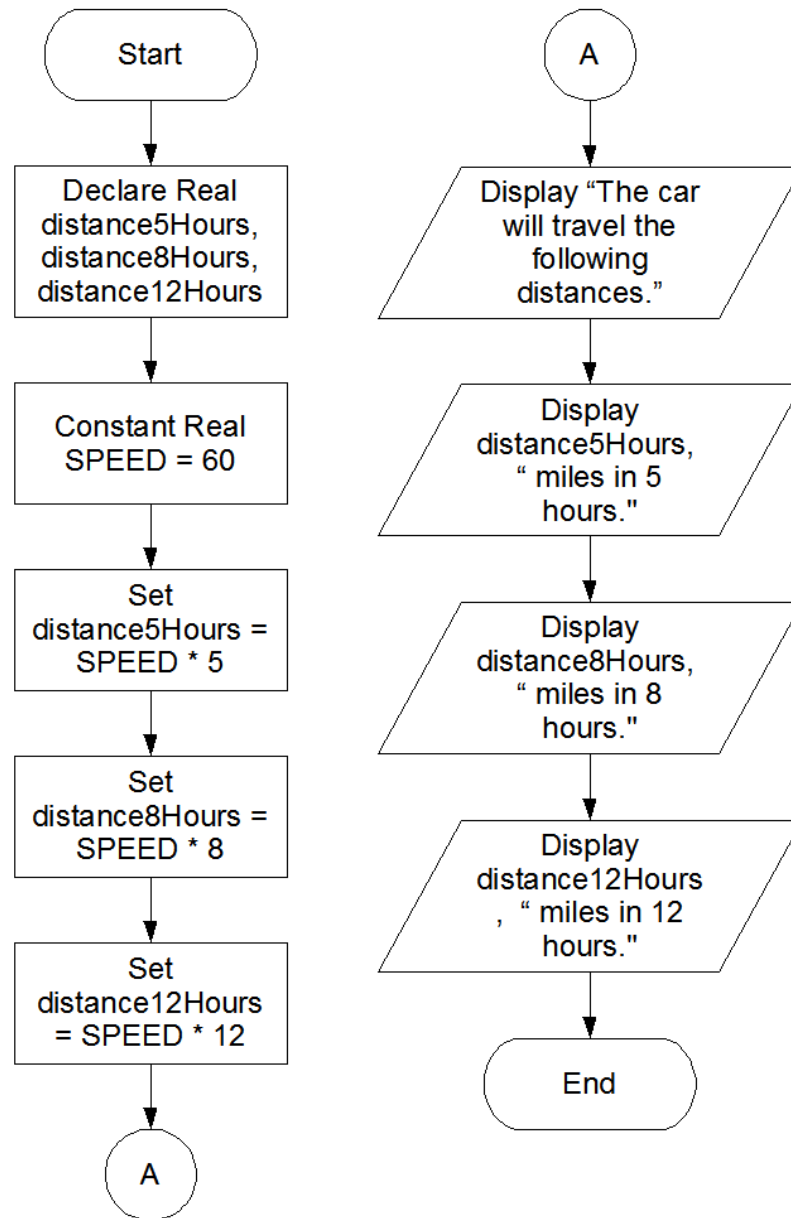
Programming Exercise 2-5

```
# Variables to hold the distances.
distance5Hours = 0.0
distance8Hours = 0.0
distance12Hours = 0.0

# Constant for the speed.
SPEED = 60

# Calculate the distance the car will travel in
# 5, 8, and 12 hours.
distance5Hours = SPEED * 5
distance8Hours = SPEED * 8
distance12Hours = SPEED * 12

# Print the results.
print ("The car will travel the following distances:")
print (distance5Hours," miles in 5 hours.")
print (distance8Hours," miles in 8 hours.")
print (distance12Hours," miles in 12 hours.")
```



Programming Exercise 2-6

```
# Variable declarations
purchase = 0.0
stateTax = 0.0
countyTax = 0.0
totalTax = 0.0
totalSale = 0.0

# Constants for the state and county tax rates
STATE_TAX_RATE = 0.04
COUNTY_TAX_RATE = 0.02

# Get the amount of the purchase.
purchase = float(input("Enter the amount of the purchase: "))

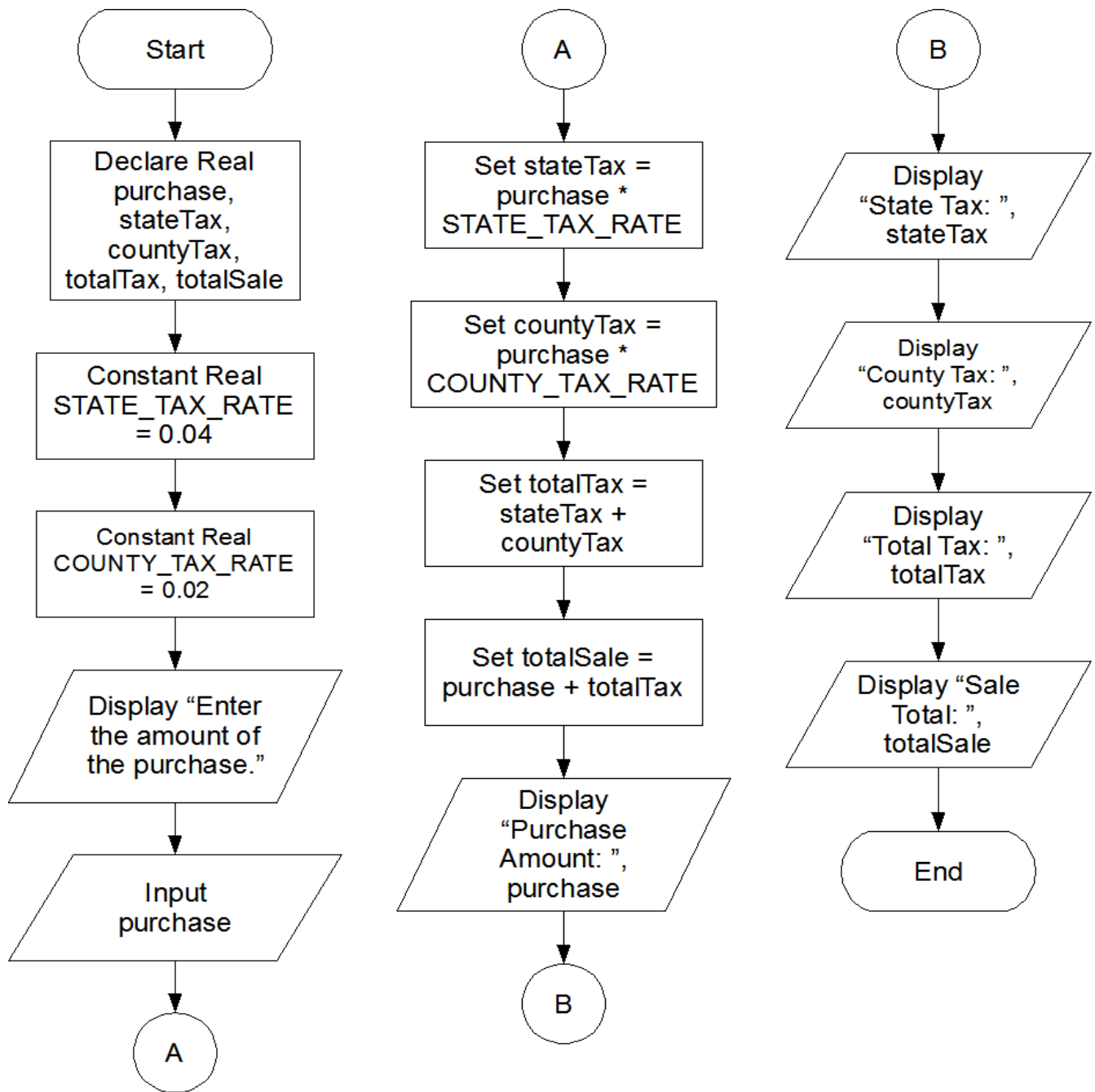
# Calculate the state sales tax.
stateTax = purchase * STATE_TAX_RATE

# Calculate the county sales tax.
countyTax = purchase * COUNTY_TAX_RATE

# Calculate the total tax.
totalTax = stateTax + countyTax

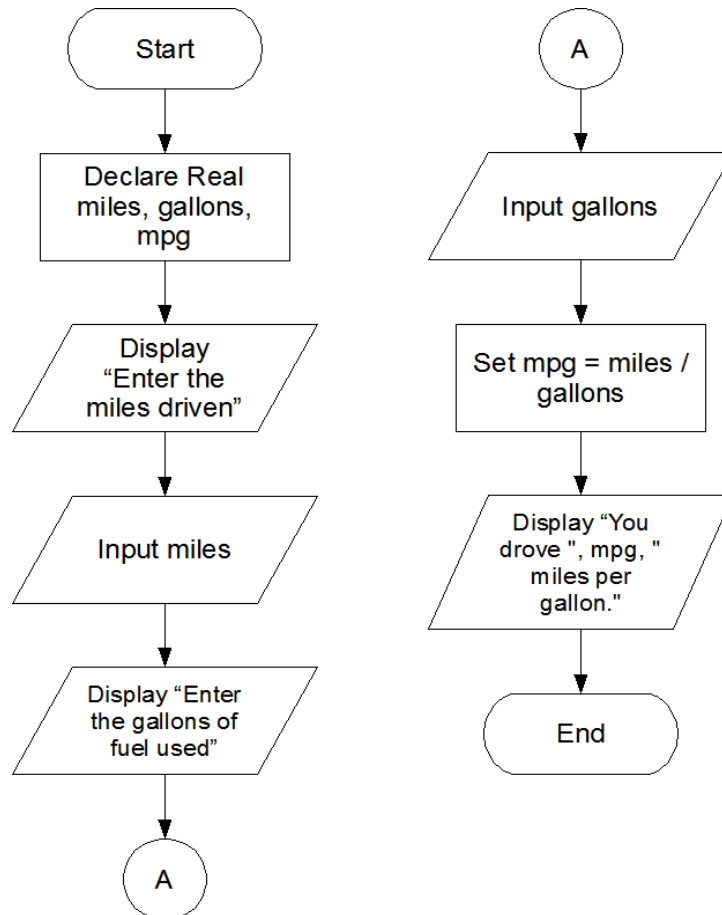
# Calculate the total of the sale.
totalSale = purchase + totalTax

# Print information about the sale.
print ("Purchase Amount: ", format(purchase, '.2f'))
print ("State Tax: ", format(stateTax, '.2f'))
print ("County Tax: ", format(countyTax, '.2f'))
print ("Total Tax: ", format(totalTax, '.2f'))
print ("Sale total: ", format(totalSale, '.2f'))
```



Programming Exercise 2-7

```
# Declare variables to hold miles driven, gallons  
# of fuel used, and miles-per-gallon.  
miles = 0.0  
gallons = 0.0  
mpg = 0.0  
  
# Get the miles driven.  
miles = float(input("Enter the miles driven: "))  
  
# Get the gallons of fuel used.  
gallons = float(input("Enter the gallons of fuel used: "))  
  
# Calculate miles-per-gallon.  
mpg = miles / gallons  
  
# Print the result.  
print ("You used", format(mpg, '.2f'), "miles per gallon.")
```



Programming Exercise 2-8

```
# Declare variables for food charges, tip, tax, and total.
food = 0.0
tip = 0.0
tax = 0.0
total = 0.0

# Constants for the tax rate and tip rate.
TAX_RATE = 0.07
TIP_RATE = 0.15

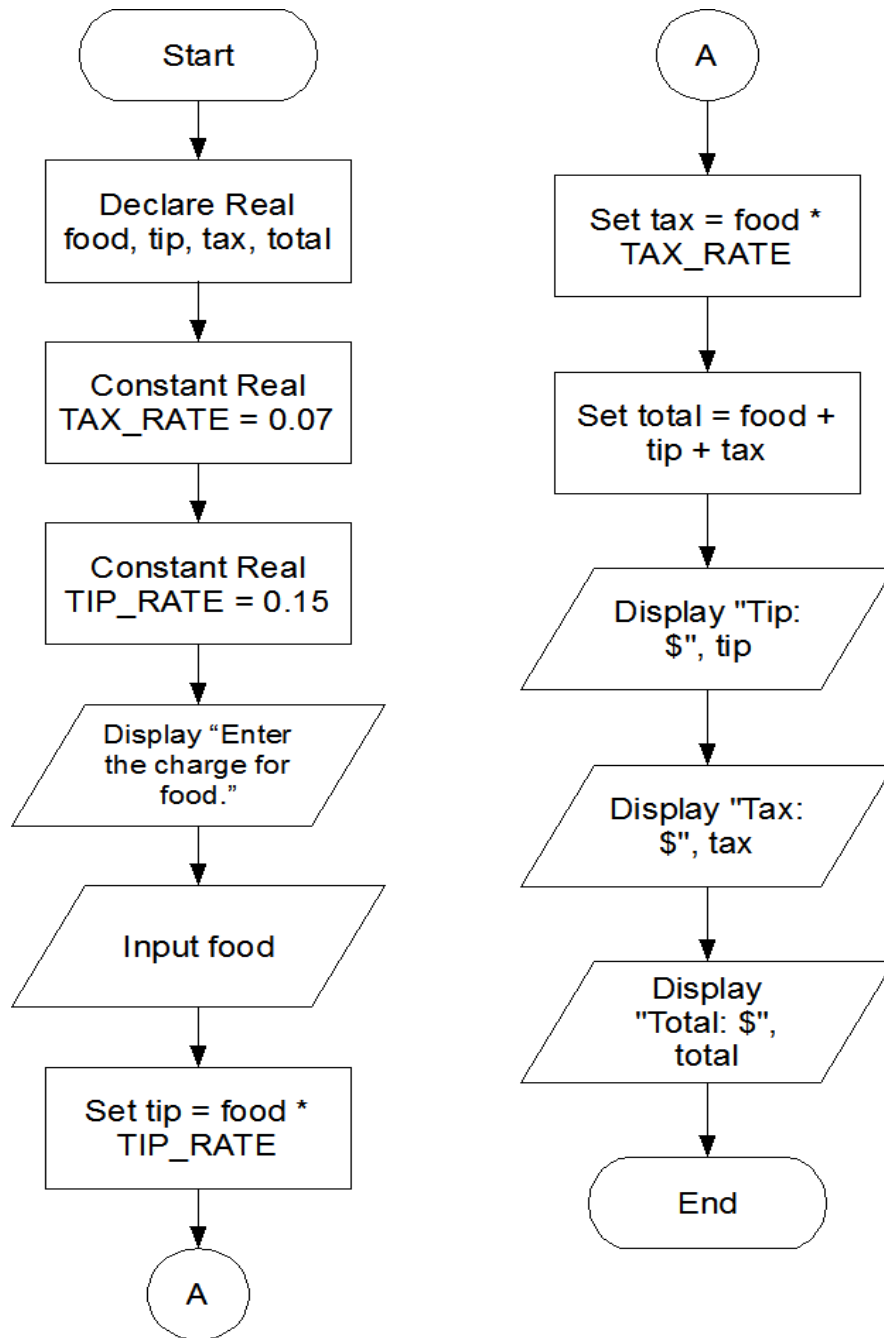
# Get the food charges.
food = float(input("Enter the charge for food: "))

# Calculate the tip.
tip = food * TIP_RATE

# Calculate the tax.
tax = food * TAX_RATE

# Calculate the total.
total = food + tip + tax

# Print the tip, tax, and total.
print ("Tip: ", format(tip, '.2f'))
print ("Tax: ", format(tax, '.2f'))
print ("Total: ", format(total, '.2f'))
```



Programming Exercise 2-9

```
# Declare variables to hold the temperatures.
celsius = 0.0
fahrenheit = 0.0

# Get the Celsius temperature.
celsius = float(input("Enter a Celsius temperature: "))

# Calculate the Fahrenheit equivalent.
fahrenheit = (9.0 / 5.0) * celsius + 32

# Display the Fahrenheit temperature.
print ("That is equal to", format(fahrenheit, '.2f'), "degrees
Fahrenheit.")
```

