# Initialize cash drawer

cashDrawer = 100.00

# Constants for tax rate and product information

TAX\_RATE = 0.075

PRODUCTS = {

101: {"price": 3.95, "taxable": False},

102: {"price": 1.85, "taxable": True},

103: {"price": 2.49, "taxable": True},

104: {"price": 5.19, "taxable": True},

105: {"price": 4.99, "taxable": False}

}

# Function to calculate sales tax

def calculate\_tax(price, quantity, taxable):

if taxable:

return price \* quantity \* TAX\_RATE

else:

return 0.0

# Function to process a sale

def process\_sale():

subtotal = 0.0

sales\_tax = 0.0

while True:

product\_id = int(input('Enter the Product ID (-1 to end): '))

if product\_id == -1:

break

if product\_id not in PRODUCTS:

print("Invalid Product ID. Please enter a valid Product ID.")

continue

quantity = int(input(f'Enter the quantity for Product ID {product\_id}: '))

product = PRODUCTS[product\_id]

price = product["price"]

taxable = product["taxable"]

tax\_amount = calculate\_tax(price, quantity, taxable)

product\_total = price \* quantity

subtotal += product\_total

sales\_tax += tax\_amount

total\_sale = subtotal + sales\_tax

print("\nReceipt:")

print(f"Subtotal: ${subtotal:.2f}")

print(f"Sales Tax: ${sales\_tax:.2f}")

print(f"Total Sale: ${total\_sale:.2f}")

return total\_sale

# Main loop for processing sales

while True:

print("\n----------[ C o r n e r S t o r e ]----------\n")

total\_sale = process\_sale()

cashDrawer += total\_sale

another\_sale = input("Would you like another sale ('y' or 'n')? ")

if another\_sale.lower() != 'y':

break

# Display total cash in the drawer

print(f"\nTotal in cash drawer: ${cashDrawer:.2f}")

Output:

Python 3.11.0 (main, Oct 24 2022, 18:26:48) [MSC v.1933 64 bit (AMD64)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

= RESTART: C:/Users/christian439/OneDrive - University of South Florida/Documents/project1.txt

----------[ C o r n e r S t o r e ]----------

Enter the Product ID (-1 to end): 101

Enter the quantity for Product ID 101: 1

Enter the Product ID (-1 to end): 102

Enter the quantity for Product ID 102: 2

Enter the Product ID (-1 to end): 103

Enter the quantity for Product ID 103: 1

Enter the Product ID (-1 to end): 104

Enter the quantity for Product ID 104: 4

Enter the Product ID (-1 to end): 105

Enter the quantity for Product ID 105: 5

Enter the Product ID (-1 to end): -1

Receipt:

Subtotal: $55.85

Sales Tax: $2.02

Total Sale: $57.87

Would you like another sale ('y' or 'n')? y

----------[ C o r n e r S t o r e ]----------

Enter the Product ID (-1 to end): 102

Enter the quantity for Product ID 102: 1

Enter the Product ID (-1 to end): 103

Enter the quantity for Product ID 103: 3

Enter the Product ID (-1 to end): 105

Enter the quantity for Product ID 105: 2

Enter the Product ID (-1 to end): -1

Receipt:

Subtotal: $19.30

Sales Tax: $0.70

Total Sale: $20.00

Would you like another sale ('y' or 'n')? y

----------[ C o r n e r S t o r e ]----------

Enter the Product ID (-1 to end): 101

Enter the quantity for Product ID 101: 1

Enter the Product ID (-1 to end): 103

Enter the quantity for Product ID 103: 2

Enter the Product ID (-1 to end): 104

Enter the quantity for Product ID 104: 2

Enter the Product ID (-1 to end): -1

Receipt:

Subtotal: $19.31

Sales Tax: $1.15

Total Sale: $20.46

Would you like another sale ('y' or 'n')? n

Total in cash drawer: $198.33