**Retail assistant Code – Project 1**

// Retail\_Assistant.cpp

// Retail Sales Assistant Program

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// Description: This program calculates sales total and sales tax of a transactions.

#include <iostream>

#include <iomanip>

using namespace std;

int main()

{

double cashDrawer = 100.00;

int productID = 0;

int quantity = 0;

double price = 0.0;

double subtotal = 0.0;

double salesTax = 0.0;

double totalSale = 0.0;

int anotherSale = 1;

double taxRate = 0.0;

// Loop for repeat sales

do

{

// Enter the first Product ID for the first sale (-1 to exit)

cout << "Enter in First Product ID(Enter -1 when done): ";

cin >> productID;

// Main loop for each sale

while (productID != -1)

{

// Enter the quantity

cout << "Enter the quantity: ";

cin >> quantity;

// Switch statement to determine the price, and calculate sales tax, if any, for the item.

switch (productID)

{

case 101:

price = 3.95;

taxRate = 0.0;

break;

case 102:

price = 1.85;

taxRate = 0.075;

break;

case 103:

price = 2.49;

taxRate = 0.075;

break;

case 104:

price = 5.19;

taxRate = 0.075;

break;

case 105:

price = 4.99;

taxRate = 0.0;

break;

case 106:

price = 3.25;

taxRate = 0.075;

break;

case 107:

price = 4.85;

taxRate = 0.0;

break;

case 108:

price = 3.99;

taxRate = 0.075;

break;

case 109:

price = 1.99;

taxRate = 0.0;

break;

case 110:

price = 5.25;

taxRate = 0.075;

break;

default:

cout << "ERROR: Product ID must be between 101 and 110" << endl;

price = 0.0;

quantity = 0;

productID = 0;

}

// Get next Product ID

cout << "Enter in the next Product ID: ";

cin >> productID;

} // End main loop for this sale

subtotal += quantity \* price;

salesTax += taxRate \* quantity \* price;

// Add subtotal and sales tax

totalSale = subtotal + salesTax;

// Print properly formatted receipt (Subtotal, Tax, Total Sale) for each sale

cout << " Subtotal: $" << fixed << setw(8) << setprecision(2) << subtotal << endl;

cout << " SalesTax: $" << fixed << setw(8) << setprecision(2) << salesTax << endl;

cout << "Total Sales: $" << fixed << setw(8) << setprecision(2) << totalSale << endl;

// Add total sale to the cashdrawer

cashDrawer += totalSale;

// Reset for next sale

subtotal = 0.0;

salesTax = 0.0;

totalSale = 0.0;

// Another sale?

cout << "Would you like to do another sale? ( 0 - N0, 1 - YES) ";

cin >> anotherSale;

// End loop for repeat sale

} while (anotherSale != 0);

// Display how much is in the cash drawer at the end

cout << "Cash Drawer Total: $" <<setw(9) << setprecision(2)

<< cashDrawer << endl;

system("pause");

}

**Retail Assistant Output - Project 1:**

Enter in First Product ID(Enter -1 when done): 101

Enter the quantity: 1

Enter in the next Product ID: 102

Enter the quantity: 2

Enter in the next Product ID: 103

Enter the quantity: 1

Enter in the next Product ID: 104

Enter the quantity: 4

Enter in the next Product ID: 105

Enter the quantity: 5

Enter in the next Product ID: 106

Enter the quantity: 2

Enter in the next Product ID: 107

Enter the quantity: 3

Enter in the next Product ID: 108

Enter the quantity: 2

Enter in the next Product ID: 109

Enter the quantity: 1

Enter in the next Product ID: 110

Enter the quantity: 1

Enter in the next Product ID: -1

Subtotal: $ 5.25

SalesTax: $ 0.39

Total Sales: $ 5.64

Would you like to do another sale? ( 0 - N0, 1 - YES) 1

Enter in First Product ID(Enter -1 when done): 102

Enter the quantity: 1

Enter in the next Product ID: 103

Enter the quantity: 3

Enter in the next Product ID: 106

Enter the quantity: 2

Enter in the next Product ID: 109

Enter the quantity: 1

Enter in the next Product ID: 110

Enter the quantity: 2

Enter in the next Product ID: -1

Subtotal: $ 10.50

SalesTax: $ 0.79

Total Sales: $ 11.29

Would you like to do another sale? ( 0 - N0, 1 - YES) 1

Enter in First Product ID(Enter -1 when done): 101

Enter the quantity: 1

Enter in the next Product ID: 106

Enter the quantity: 2

Enter in the next Product ID: 107

Enter the quantity: 3

Enter in the next Product ID: 108

Enter the quantity: 2

Enter in the next Product ID: -1

Subtotal: $ 7.98

SalesTax: $ 0.60

Total Sales: $ 8.58

Would you like to do another sale? ( 0 - N0, 1 - YES) 0

Cash Drawer Total: $ 125.51

Press any key to continue . . .

C:\Users\Cameron Willliams\source\repos\Project5\Debug\Project5.exe (process 796) exited with code 0.

Press any key to close this window . . .