***C++ TASK 2: Vending Machine***

#include <iostream>

using namespace std;

class cashinfo

{

private:

int cash;

public:

int CurrentBalance();

void accept(int amountIn);

cashinfo()

{

cash = 0;

}

cashinfo(int cashIn)

{

cash = cashIn;

}

};

int cashinfo :: CurrentBalance()

{

return cash;

}

void cashinfo :: accept(int amountIn)

{

cash = cash + amountIn;

}

class machine

{

private:

int numberOfItems;

int cost;

public:

int getNoOfItems()

{

return numberOfItems;

}

int getCost()

{

return cost;

}

void makeSale()

{

numberOfItems--;

}

machine()

{

numberOfItems = 50;

cost = 50;

}

machine(int setNoOfItems, int setCost)

{

numberOfItems = setNoOfItems;

cost = setCost;

}

};

void showSelection();

void sellProduct(machine & product, cashinfo & pCounter);

int main()

{

cashinfo counter;

machine candy(4, 50);

machine chips(5, 65);

machine gum(4, 45);

machine cookies(5, 85);

int choice;

showSelection();

cin >> choice;

while (choice != 5)

{

switch (choice)

{

case 1:

sellProduct(candy, counter);

break;

case 2:

sellProduct(chips, counter);

break;

case 3:

sellProduct(gum, counter);

break;

case 4:

sellProduct(cookies, counter);

break;

default:

cout << "Invalid selection." << endl;

}

showSelection();

cin >> choice;

}

return 0;

}

void showSelection()

{

cout << "\*\*\* Welcome to Candy Shop \*\*\*" << endl;

cout << "To select an item, enter " << endl;

cout << "1 for Candy" << endl;

cout << "2 for Chips" << endl;

cout << "3 for Gum" << endl;

cout << "4 for Cookies" << endl;

cout << "5 to exit" << endl;

}

void sellProduct(machine & product, cashinfo & pCounter)

{

int amount1;

int amount2;

if (product.getNoOfItems() > 0)

{

cout << "Please deposit " << product.getCost() << " Rupees " << endl;

cin >> amount1;

if (amount1 < product.getCost())

{

cout << "Please deposit another " << product.getCost()- amount1 << " Rupees " << endl;

cin >> amount2;

amount1 = amount1 + amount2;

}

if (amount1 >= product.getCost())

{

pCounter.accept(amount1);

product.makeSale();

cout << "Collect your item at the bottom and enjoy" << endl;

cout<<"Collect remaining amount :"<<amount1-(product.getCost())<<endl;

}

else

cout << "The amount is not enough. " << "Collect what you deposited." << endl;

cout << "\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*" << endl << endl;

}

else

cout << "Sorry, this item is sold out." << endl;

}