// inventory - INVENTORY=>ProductId|ProductName|Quantity|Price-Per-Quantity

// INVENTORY=>1|GoodDay250g|20|10

//INVENTORY=>2|GoodDay500g|10|20

// INVENTORY=>3|GoodDay100g|5|5

// sale - SALE=>ProductId|Quantity;ProductId|Quantity

//SALE=>1|1;2|3;3|3

//SALE=>1|1;2|3

// stock - STOCK=>Product ID

//STOCK=>1

//STOCK=>2

//STOCK=>3

#include<iostream>

using namespace std;

int to\_int(string temp)

{

int size = temp.size();

int num = 0;

for(int itr = 0; itr<size;itr++)

{

if(temp[itr] == '0') num= (num\*10)+0;

if(temp[itr] == '1') num= (num\*10)+1;

if(temp[itr] == '2') num= (num\*10)+2;

if(temp[itr] == '3') num= (num\*10)+3;

if(temp[itr] == '4') num= (num\*10)+4;

if(temp[itr] == '5') num= (num\*10)+5;

if(temp[itr] == '6') num= (num\*10)+6;

if(temp[itr] == '7') num= (num\*10)+7;

if(temp[itr] == '8') num= (num\*10)+8;

if(temp[itr] == '9') num= (num\*10)+9;

}

return num;

}

class inventory

{

public:

int ProductId;

string ProductName;

int Quantity;

int Price\_Per\_Quantity;

void get\_input(string input)

{

string arr[4];

int size = input.size();

int arr\_itr = 0;

int start\_index = 11;

for(int itr = 0; itr<3; itr++)

{

arr[arr\_itr] = "";

for(int in\_itr = start\_index; in\_itr<size; in\_itr++)

{

if(input[in\_itr] != '|')

{

arr[arr\_itr] +=input[in\_itr];

}

else

{

start\_index = in\_itr+1;

arr\_itr +=1;

break;

}

}

}

arr[arr\_itr] = "";

for(int itr = start\_index; itr<size; itr++)

{

arr[arr\_itr] += input[itr];

}

//cout<<arr[0];

ProductId = to\_int(arr[0]);

ProductName = arr[1];

Quantity = to\_int(arr[2]);

Price\_Per\_Quantity = to\_int(arr[3]);

cout<<"Inventory updated\n";

}

};

class sale

{

public:

int sale\_ProductId;

int sale\_Quantity;

void sale\_get\_input(string pro\_id, string quan)

{

sale\_ProductId = to\_int(pro\_id);

sale\_Quantity = to\_int(quan);

//cout<<ProductId<<endl;

//cout<<quan<<endl;

}

};

class stock

{

public:

//STOCK=>10

int show\_stock(string input)

{

string stock\_id = "";

for(int itr = 8 ; itr<input.size();itr++ )

{

stock\_id+=input[itr];

}

int stock\_val;

stock\_val = to\_int(stock\_id);

return stock\_val;

}

};

/\*

void print\_bill(int no\_of\_products, int products\_count)

{

}

\*/

int main()

{

int products\_count = 0;

cout<<"Enter product count";

cin>>products\_count;

//int dummy = products\_count;

string input;

int choice;

// object creation

inventory i[products\_count];

sale sa[20];

stock st;

int enquiry = 1;

while(enquiry)

{

cout<< " Press '1' to continue , Press '0' to quit: ";

cin>>enquiry;

cout<<"\n";

if(enquiry == 1)

{

scanf("\n");

getline(cin, input);

int itr = 0;

if(input[itr] == 'I') choice = 1;

else if(input[itr] == 'S' and input[itr+1] == 'A') choice = 2;

else choice = 3;

switch(choice)

{

case 1:

//int products\_count\_idx = 0;

for(int itr = 0; itr<products\_count; itr++)

{

i[itr].get\_input(input);

getline(cin, input);

}

break;

case 2:

{

//getline(cin, input);

int no\_of\_products\_idx = 0;

int no\_of\_products = 1;

int size = input.size();

// to know no of products

for(int itr = 0; itr<size; itr++)

{

if(input[itr] == ';') no\_of\_products +=1;

}

//cout<<no\_of\_products;

string arr[no\_of\_products\*2];

int arr\_itr = 0;

int start\_index = 6;

for(int itr = 0; itr<no\_of\_products\*2; itr++)

{

arr[arr\_itr] = "";

for(int in\_itr = start\_index; in\_itr<size; in\_itr++)

{

if(input[in\_itr] != '|' and input[in\_itr] != ';')

{

arr[arr\_itr] +=input[in\_itr];

}

else

{

start\_index = in\_itr+1;

arr\_itr +=1;

break;

}

}

}

arr[arr\_itr] = "";

for(int itr = start\_index; itr<size; itr++)

{

arr[arr\_itr] += input[itr];

}

/\*

for(int itr = 0; itr<no\_of\_products\*2; itr++)

{

cout<<arr[itr];

}

cout<<"\n";\*/

for(int itr = 0; itr<no\_of\_products\*2; itr+=2)

{

sa[no\_of\_products\_idx].sale\_get\_input(arr[itr], arr[itr+1]);

no\_of\_products\_idx+=1;

}

//print\_bill

int total = 0;

cout<< " == BILL ==\n";

cout<<no\_of\_products<<endl;

//int no\_of\_products\_idx = 0

for(int itr = 0; itr<no\_of\_products; itr+=1)

{

for(int in\_itr = 0; in\_itr<products\_count; in\_itr++)

{

if(i[in\_itr].ProductId == sa[itr].sale\_ProductId)

{

//Product ID - Product Name - Quantity Purchased by Customer - Product Price - Offer-Id - Net Price

total += sa[itr].sale\_Quantity \* i[in\_itr].Price\_Per\_Quantity;

cout<< i[in\_itr].ProductId << "-" << i[in\_itr].ProductName <<"-" << sa[itr].sale\_Quantity<<"-" << i[in\_itr].Price\_Per\_Quantity << "- NA -" << sa[itr].sale\_Quantity \* i[in\_itr].Price\_Per\_Quantity<<endl;

i[in\_itr].Quantity-= sa[itr].sale\_Quantity;

}

}

}

cout<< " == Total ==\n";

cout<< " "<<total<<endl;

cout<<"===========\n";

break;

}

case 3:

int stock\_val;

stock\_val = st.show\_stock(input);

cout<< i[stock\_val].ProductName << " - " << i[stock\_val].Quantity<<endl;

break;

}

//dummy--;

}

}

return 0;

}