//Determines the retail price of an item according to

//the pricing policies of the Quick-Shop supermarket chain.

#include <iostream>

const double LOW\_MARKUP = 0.05; //5%

const double HIGH\_MARKUP = 0.10 //10%

const int THRESHOLD = 7; //Use HIGH\_MARKUP if not expected

//to sell in 7 days or less.

void introduction();

//Postcondition: Description of program is written on the screen.

void get\_input(double& cost, int& turnover);

//Precondition: User is ready to enter values correctly.

//Postcondition: The value of cost has been set to the

//wholesale cost of one item. The value of turnover has been

//set to the expected number of days until the item is sold.

double price(double cost, int turnover);

//Precondition: cost is the wholesale cost of one item.

//turnoner is the expected number of days until sale of the item.

//Returns the retail price of the item.

void give\_output(double cost, int turnover, double price);

//Precondition: cost is the wholsale cost of one item; turnover is the

//expected time until sale of the item; price is the retail price of he item.

//written to the screen.

int main()

{

double wholesale\_cost, retail\_price;

int shelf\_time;

introduction();

get\_input(wholesale\_cost, shelf\_time);

retail\_price = price(wholesale\_cost, shelf\_time);

give\_output(wholesale\_cost, shelf\_time, retail\_price);

return 0;

}

//Uses iostream:

void introduction()

{

using namespace std;

cout << "This program determines the retail price for\n"

<< "an item at a Quick-Shop supermarket store.\n";

}

//Uses iostream:

void get\_input(double& cost, int& turnover)

{

using namespace std;

cout << "Enter the wholesale cost of item: $";

cin >> cost;

cout << " Enter the expected number of days until sold: ";

cin >> turnover;

}

//Uses iostream:

void give\_output(double cost, int turnover, double price)

{

using namespace std;

cout.setf(ios::fixed);

cout.setf(ios::showpoint);

cout.precision(2);

cout << "Wholesale cost = $" << cost << endl

<< "Expected time until sold = "

<< turnover << " days" << endl

<< "Retail price = $" << price << endl;

}

//Uses defined constants LOW\_MARKUP, HIGH\_MARKUP, and THRESHOLD:

double price(double cost, int turnoer)

{

if (turnover <= THRESHOLD)

return ( cost + (LOW\_MARKUP \* cost) );

else

return ( cost + (HIGH\_MARKUP \* cost) );

}