Vending machine

// claim the variables

int enterMoney = 0;

int cost = 0;

int cent\_50 = 0;

int cent\_20 = 0;

int cent\_10 = 0;

int cent\_5 = 0;

int cent\_2 = 0;

int cent\_1 = 0;

int leftMoney = 0;

int changes = 0;

// ask the users to input the money they have and the price of the item they would like to buy

display “Amount of money entered(Integer and less than 100 cents): ”;

input enterMoney;

display “Item chosen cost(Integer): ”

input cost;

// use if statement to ensure buyer have enough money to buy the item they select

if (enterMoney > cost)

{

changes = enterMoney – cost; // changes in total

cent\_50 = changes / 50; // number of 50 cent coin

leftMoney = changes % 50; // changes after taking 50 cent coin

cent\_20 = leftMoney / 20; // number of 20 cent coins

leftMoney = leftMoney % 20; // changes after taking 20 cent coins

cent\_10 = leftMoney / 10; // number of 10 cent coins

leftMoney = leftMoney % 10; // changes after taking 10 cent coins

cent\_5 = leftMoney / 5; // number of 5 cent coins

leftMoney = leftMoney % 5; // changes after taking 5 cent coins

cent\_2 = leftMoney / 2; // number of 2 cent coins

leftMoney = leftMoney % 2; // changes after taking 2 cent coins

cent\_1 = leftMoney / 1; // number of 1 cent coins

// display the result

display “\nThe total changes are ” + changes +

“\nAnd the result of calculating how many coins to dispense would be: ” +

“\nNumber of 50 cent coins is ” + cent\_50 +

“\nNumber of 20 cent coins is “ + cent\_20 +

“\nNumber of 10 cent coins is ” + cent\_10 +

“\nNumber of 5 cent coins is “ + cent\_5 +

“\nNumber of 2 cent coins is “ + cent\_2 +

“\nNumber of 1 cent coins is ” + cent\_1;

}

// if money they have is less than the cost, they cannot buy it

if (enterMoney < cost)

{

display “Sorry, you do not have enough money to afford this”;

}

system(“Pause”);

return 0;