

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;

```