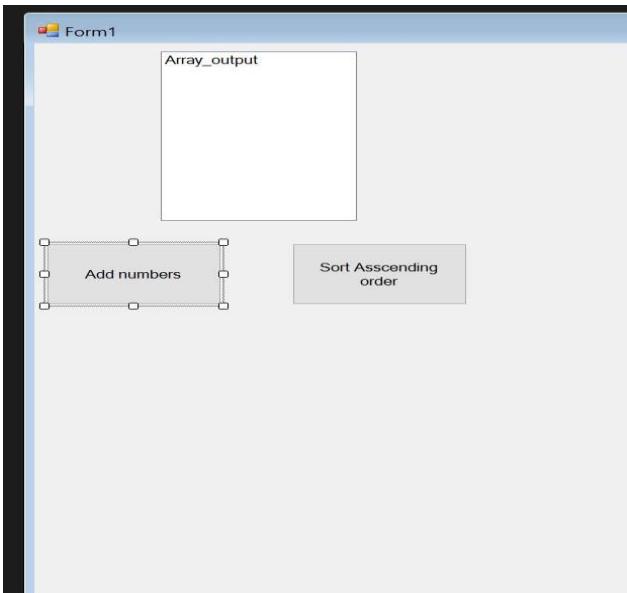


Question 1:

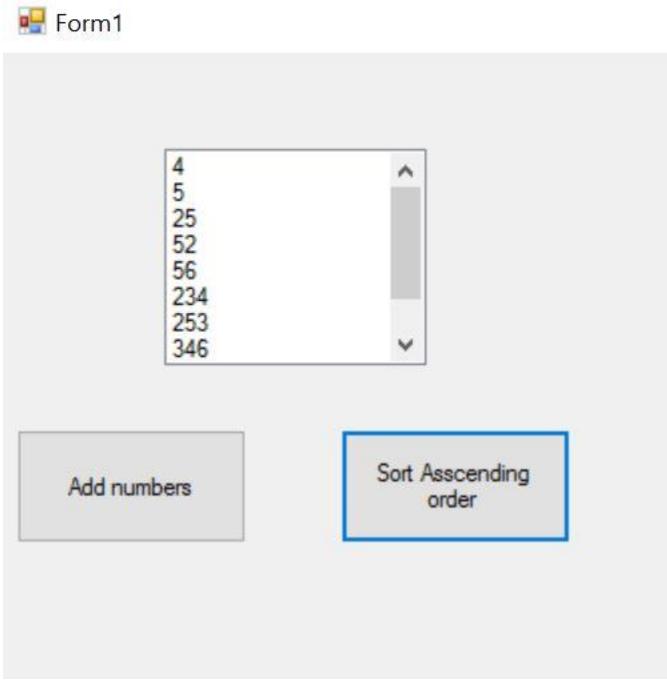
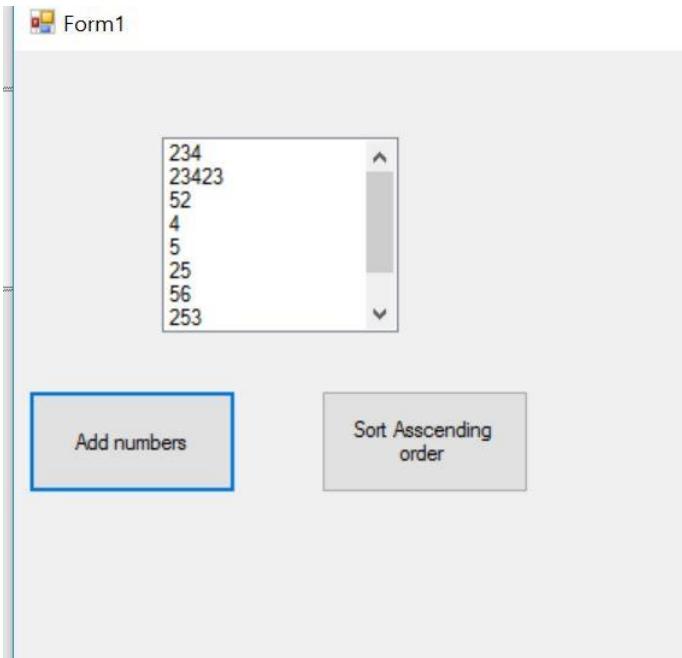
Design View:



Question 1 Code:

```
Form1.vb*  X  Form1.vb [Design]*      SORTING
Form1.vb
  SORTING
  2
  3
  4
  5  Dim numbers(99) As Integer
  6
  7
  8  References
  9  Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
 10  References
 11    Array_output.Items.Clear()
 12    For i As Integer = 0 To 99
 13      numbers(i) = CInt(InputBox("Enter Value"))
 14      Array_output.Items.Add(numbers(i))
 15    Next
 16  End Sub
 17
 18  References
 19  Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
 20    Array.Sort(numbers)
 21    displaySortedNumbers()
 22  End Sub
 23
 24  References
 25  Private Sub displaySortedNumbers()
 26    For Each item As Integer In numbers
 27      Array_output.Items.Add(item)
 28    Next
 29  End Sub
 30 End Class
```

Output:



Sorted in ascending order.

Question 2- Design View:

Enter Conversion Value:

Select a conversion type

USD to Euro
USD to Yen

p

Convert

Answer:

Unbound

Question 2 Code:

```
1      2 references
2  ↳ Partial Class Default4
3      Inherits System.Web.UI.Page
4
5
6      0 references
7  ↳ Protected Sub Button1_Click1(sender As Object, e As EventArgs) Handles Button1.Click
8      Dim number As Double
9      Dim convert As Double
10
11      number = TextBox1.Text
12      If ListBox2.SelectedValue = 1 Then
13          ListBox1.Items.Clear()
14          convert = number * 0.88
15          ListBox1.Items.Add(convert)
16      ElseIf ListBox2.SelectedValue = 2 Then
17          ListBox1.Items.Clear()
18          convert = number * 113.14
19          ListBox1.Items.Add(convert)
20
21      End If
22
23  ↳ End Sub
24 End Class
```

Question 2 Output:

X Convert ▾ Select

Enter Conversion Value:

Select a conversion type

USD to Euro

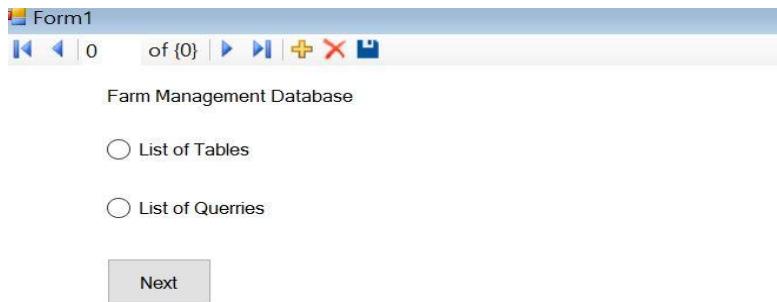
USD to Yen

Convert

Answer:

Question 3:
Microsoft Visual Studio Form (Project 12):

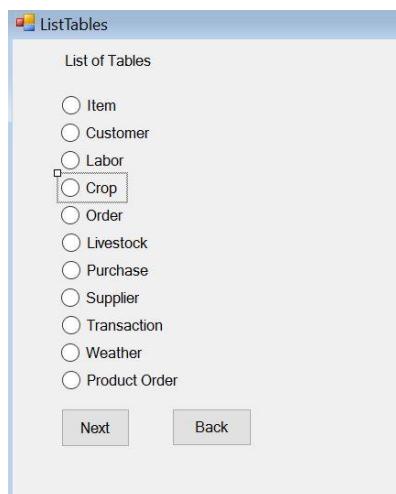
Design View (Main Form):



Code View:

```
0 references
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    If RadioButton1.Checked Then
        Me.Hide()
        ListTables.Show()
    ElseIf RadioButton2.Checked Then
        Me.Hide()
        ListQuerries.Show()
    End If
End Sub
End Class
```

Output:



Code View: List of Tables

```
Module MainForm
    ' Reference
    Public Class ListTables
        ' References
        Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
            If RadioButton1.Checked Then
                Me.Hide()
                Item.Show()
            ElseIf RadioButton2.Checked Then
                Me.Hide()
                Customer.Show()
            ElseIf RadioButton3.Checked Then
                Me.Hide()
                Labor.Show()
            ElseIf RadioButton4.Checked Then
                Me.Hide()
                Crop.Show()
            ElseIf RadioButton5.Checked Then
                Me.Hide()
                Orden.Show()
            ElseIf RadioButton6.Checked Then
                Me.Hide()
                Livestock.Show()
            ElseIf RadioButton7.Checked Then
                Me.Hide()
                Purchase.Show()
            ElseIf RadioButton8.Checked Then
                Me.Hide()
                Supplier.Show()
            ElseIf RadioButton9.Checked Then
                Me.Hide()
                Transaction.Show()
            ElseIf RadioButton10.Checked Then
                Me.Hide()
                Weather.Show()
            ElseIf RadioButton11.Checked Then
                Me.Hide()
                ProductOrder.Show()
            End If
        End Sub

        ' References
        Private Sub ListTables_Load(sender As Object, e As EventArgs) Handles MyBase.Load
        End Sub

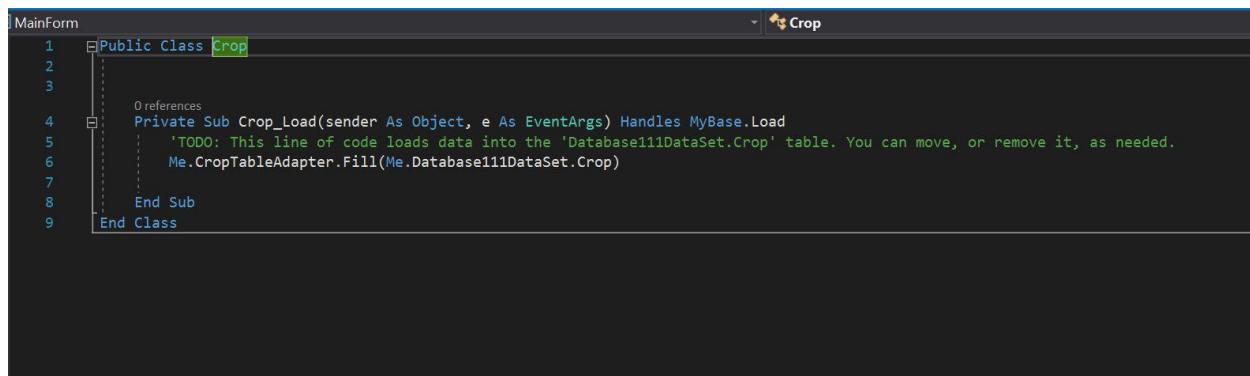
        ' References
        Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
            Me.Hide()
            Form1.Show()
        End Sub
    End Class
End Module
```

Crop Design View:

The screenshot shows a Windows application window titled "Crop". The interface includes a toolbar with icons for back, forward, search, and other file operations. Below the toolbar is a status bar displaying "4 0 of 0". The main area contains a table with two columns: "ID" and "Average Yield". There is one row in the table with a single asterisk (*) in the first column.

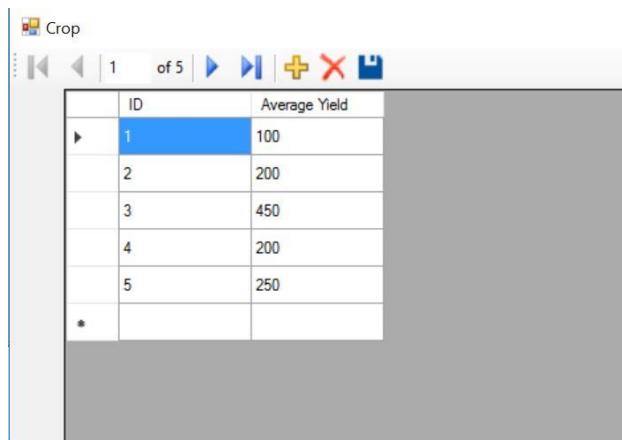
ID	Average Yield
*	

Code view:



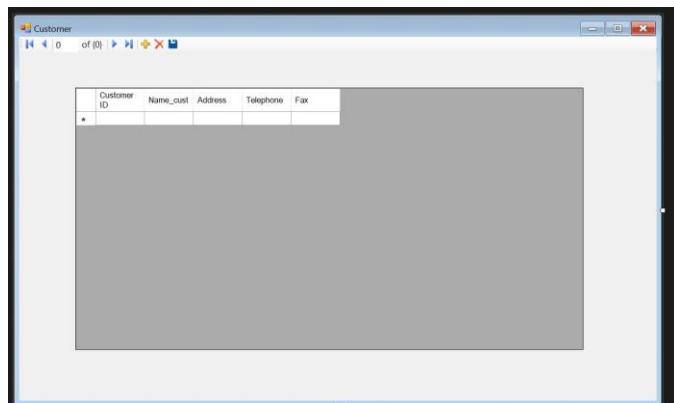
```
 MainForm          |  Crop
 1  Public Class Crop
 2
 3
 4      0 references
 5      Private Sub Crop_Load(sender As Object, e As EventArgs) Handles MyBase.Load
 6          'TODO: This line of code loads data into the 'Database111DataSet.Crop' table. You can move, or remove it, as needed.
 7          Me.CropTableAdapter.Fill(Me.Database111DataSet.Crop)
 8
 9      End Sub
End Class
```

Crop Output Table:



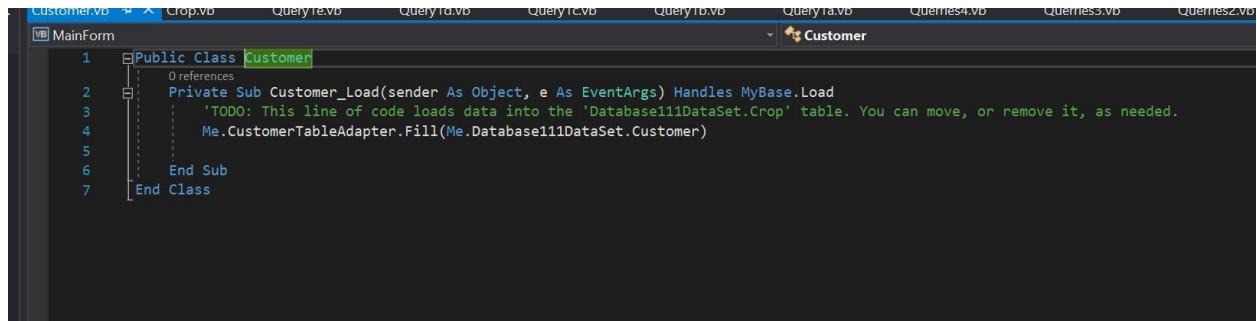
ID	Average Yield
1	100
2	200
3	450
4	200
5	250
*	

Customer Design View:



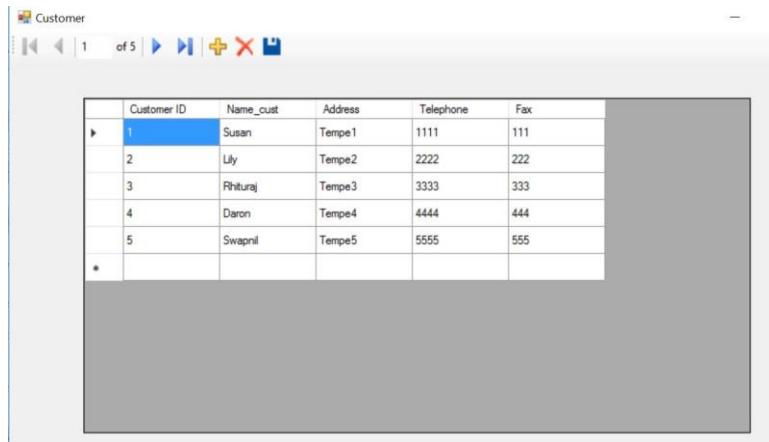
Customer ID	Name_cust	Address	Telephone	Fax
*				

Customer code view:



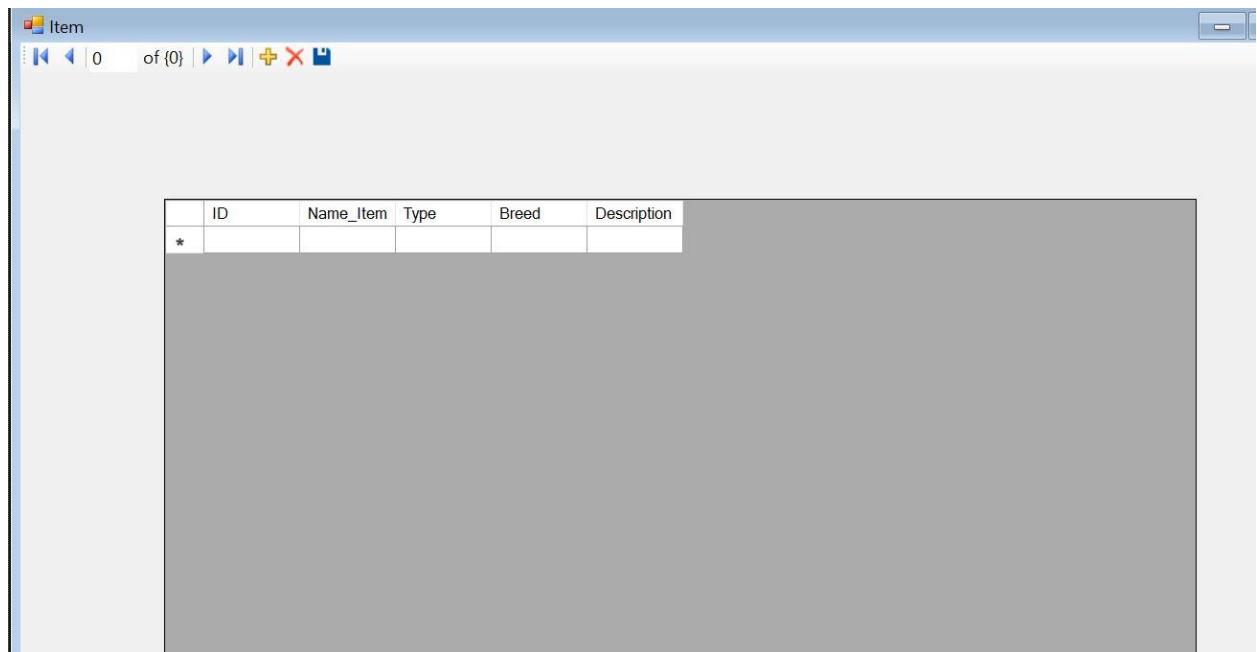
```
Customer.vb  Crop.vb  Query1.vb  Query1d.vb  Query1c.vb  Query1b.vb  Customer  Queries4.vb  Queries3.vb  Queries2.vb
MainForm
1  Public Class Customer
2  End Class
3      0 references
4  Private Sub Customer_Load(sender As Object, e As EventArgs) Handles MyBase.Load
5      'TODO: This line of code loads data into the 'Database11DataSet.Crop' table. You can move, or remove it, as needed.
6      Me.CustomerTableAdapter.Fill(Me.Database11DataSet.Customer)
7  End Sub
```

Customer Output Table:



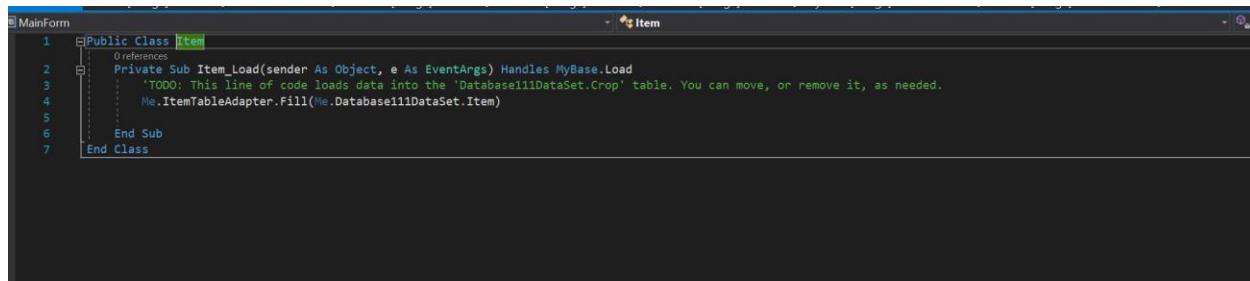
	Customer ID	Name_cust	Address	Telephone	Fax
▶	1	Susan	Tempe1	1111	111
	2	Lily	Tempe2	2222	222
	3	Rhturaj	Tempe3	3333	333
	4	Daron	Tempe4	4444	444
*	5	Swapnil	Tempe5	5555	555
*					

Item Design View:



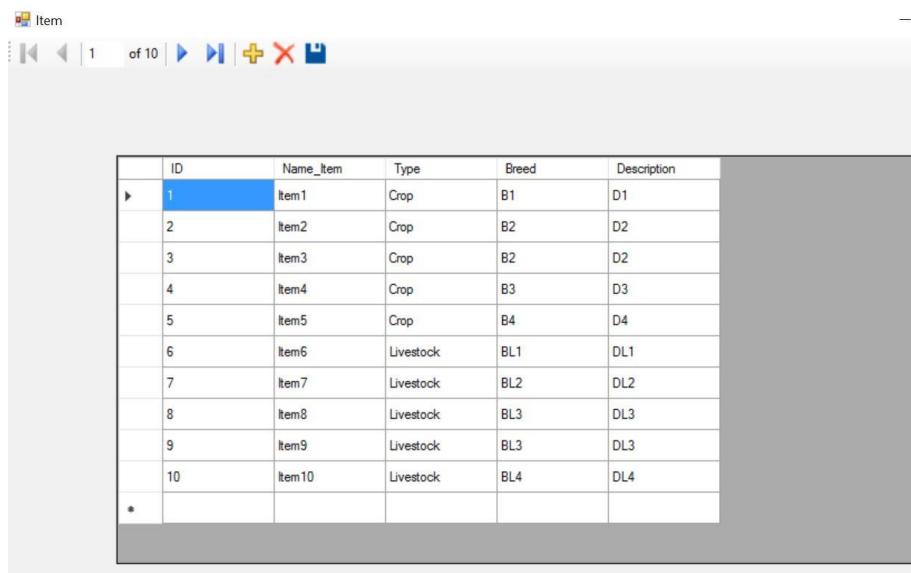
	ID	Name_Item	Type	Breed	Description
*					

Code view:



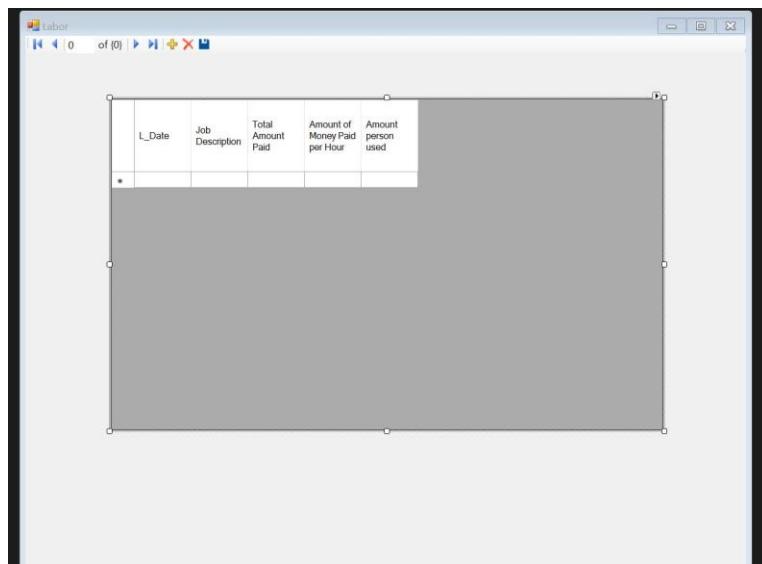
```
1  Public Class Item
2      References
3      Private Sub Item_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4          'TODO: This line of code loads data into the 'Database111DataSet.Crop' table. You can move, or remove it, as needed.
5          Me.ItemTableAdapter.Fill(Me.Database111DataSet.Item)
6
7  End Class
```

Item Output View:



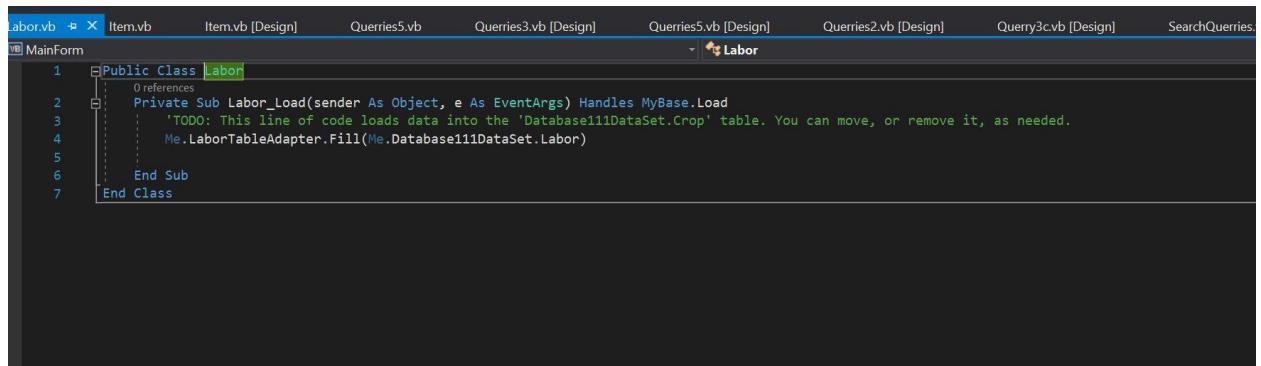
	ID	Name_Item	Type	Breed	Description
▶	1	item1	Crop	B1	D1
	2	item2	Crop	B2	D2
	3	item3	Crop	B2	D2
	4	item4	Crop	B3	D3
	5	item5	Crop	B4	D4
	6	item6	Livestock	BL1	DL1
	7	item7	Livestock	BL2	DL2
	8	item8	Livestock	BL3	DL3
	9	item9	Livestock	BL3	DL3
	10	item10	Livestock	BL4	DL4
*					

Labor Design View:



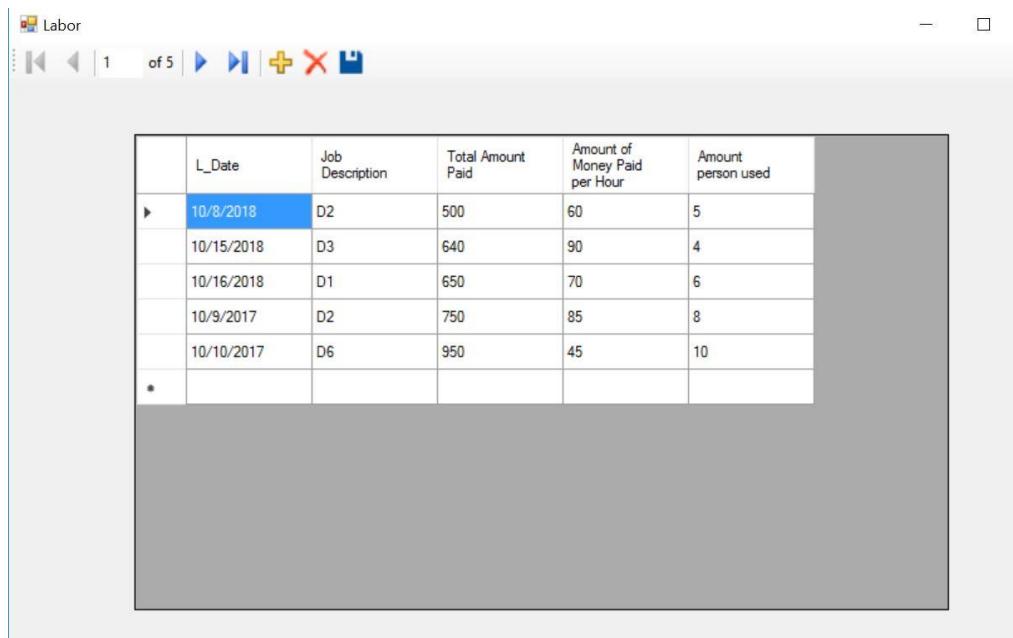
L_Date	Job Description	Total Amount Paid	Amount of Money Paid per Hour	Amount person used
*				

Code view:



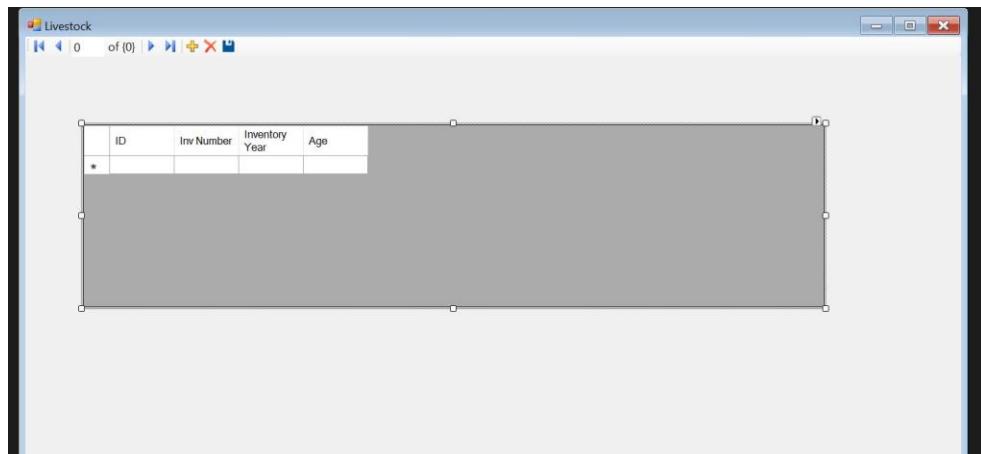
```
Labor.vb  X Item.vb  Item.vb [Design]  Queries5.vb  Querries3.vb [Design]  Querries5.vb [Design]  Querries2.vb [Design]  Querry3c.vb [Design]  SearchQuerries.vb
VB MainForm
1  Public Class Labor
2      References
3      Private Sub Labor_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4          'TODO: This line of code loads data into the 'Database11DataSet.Crop' table. You can move, or remove it, as needed.
5          Me.LaborTableAdapter.Fill(Me.Database11DataSet.Labor)
6      End Sub
7  End Class
```

Labor Output view:



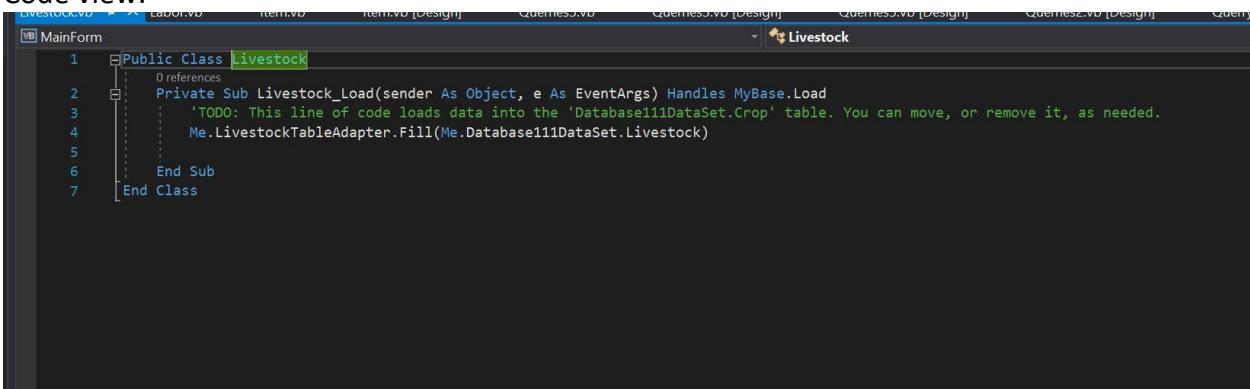
	L_Date	Job Description	Total Amount Paid	Amount of Money Paid per Hour	Amount person used
▶	10/8/2018	D2	500	60	5
	10/15/2018	D3	640	90	4
	10/16/2018	D1	650	70	6
	10/9/2017	D2	750	85	8
*	10/10/2017	D6	950	45	10

Livestock Design View:



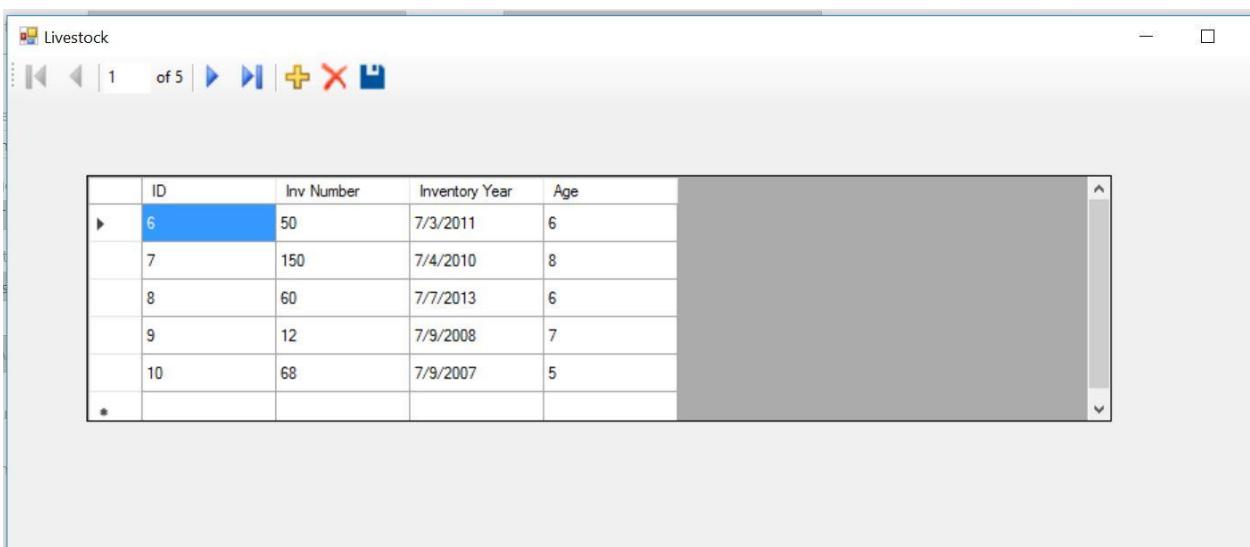
ID	Inv Number	Inventory Year	Age
*			

Code view:



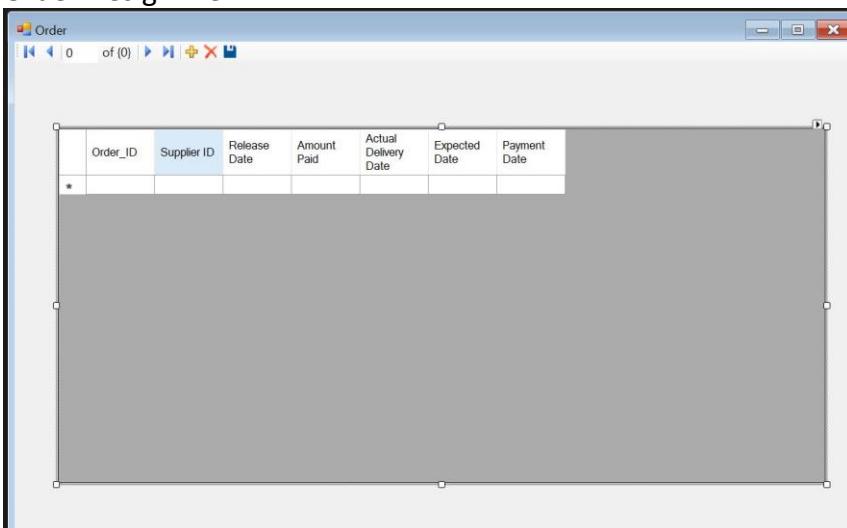
```
VB MainForm
1  Public Class Livestock
2      0 references
3      Private Sub Livestock_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4          'TODO: This line of code loads data into the 'Database111DataSet.Crop' table. You can move, or remove it, as needed.
5          Me.LivestockTableAdapter.Fill(Me.Database111DataSet.Livestock)
6
7      End Sub
8  End Class
```

Livestock Output:



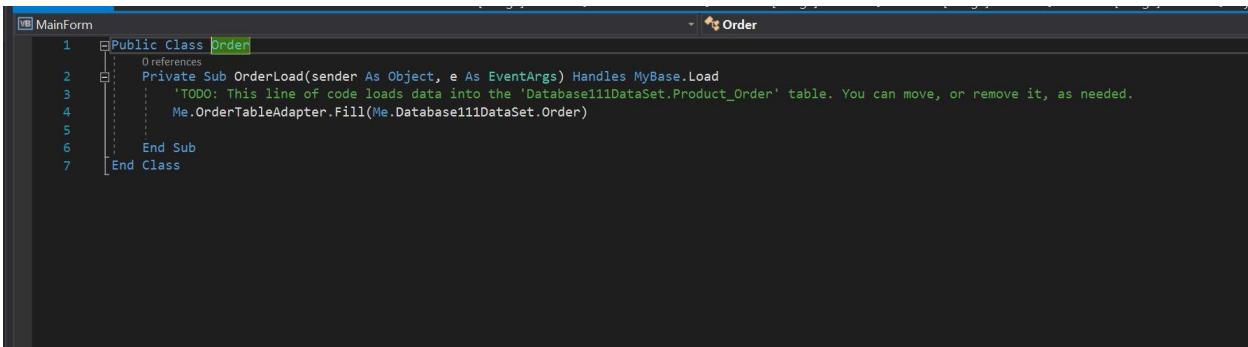
ID	Inv Number	Inventory Year	Age
6	50	7/3/2011	6
7	150	7/4/2010	8
8	60	7/7/2013	6
9	12	7/9/2008	7
10	68	7/9/2007	5
*			

Order Design View:



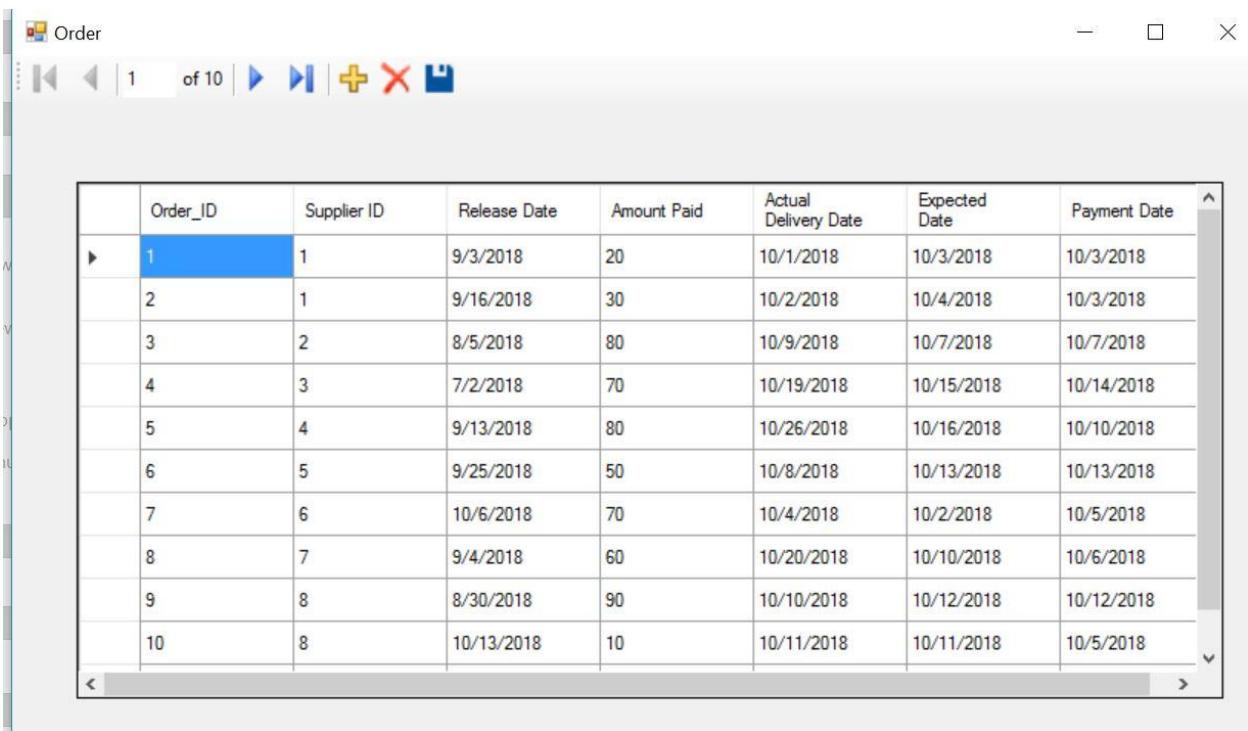
Order_ID	Supplier ID	Release Date	Amount Paid	Actual Delivery Date	Expected Date	Payment Date
*						

Code view:



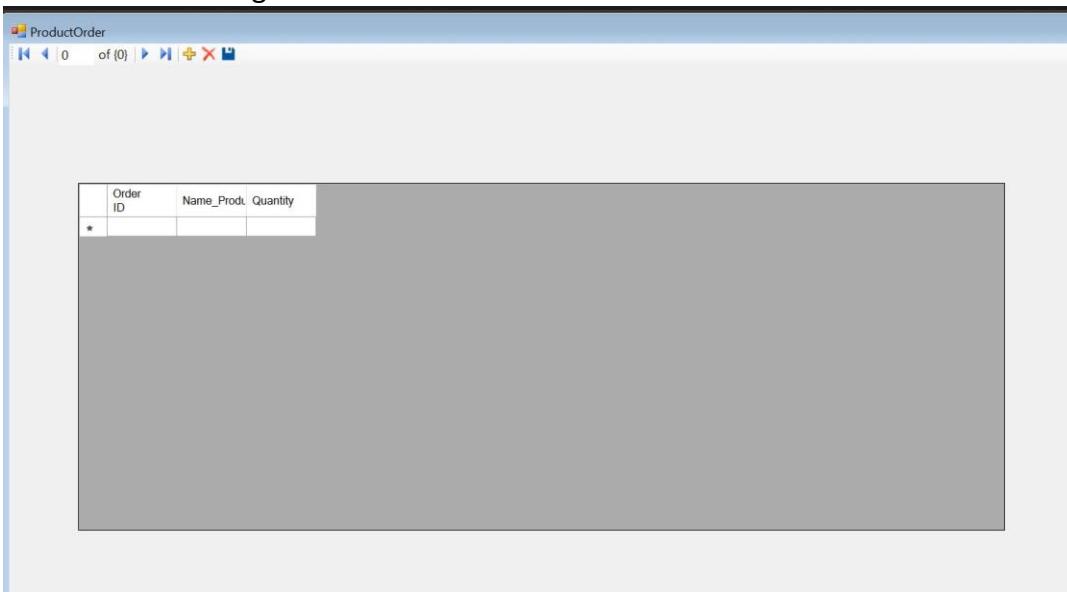
```
VB MainForm
1  Public Class Order
2    Private Sub OrderLoad(sender As Object, e As EventArgs) Handles MyBase.Load
3      'TODO: This line of code loads data into the 'Database111DataSet.Product_Order' table. You can move, or remove it, as needed.
4      Me.OrderTableAdapter.Fill(Me.Database111DataSet.Order)
5    End Sub
6  End Class
```

Order Output:



	Order_ID	Supplier ID	Release Date	Amount Paid	Actual Delivery Date	Expected Date	Payment Date
▶	1	1	9/3/2018	20	10/1/2018	10/3/2018	10/3/2018
	2	1	9/16/2018	30	10/2/2018	10/4/2018	10/3/2018
	3	2	8/5/2018	80	10/9/2018	10/7/2018	10/7/2018
	4	3	7/2/2018	70	10/19/2018	10/15/2018	10/14/2018
	5	4	9/13/2018	80	10/26/2018	10/16/2018	10/10/2018
	6	5	9/25/2018	50	10/8/2018	10/13/2018	10/13/2018
	7	6	10/6/2018	70	10/4/2018	10/2/2018	10/5/2018
	8	7	9/4/2018	60	10/20/2018	10/10/2018	10/6/2018
	9	8	8/30/2018	90	10/10/2018	10/12/2018	10/12/2018
	10	8	10/13/2018	10	10/11/2018	10/11/2018	10/5/2018

Product Order Design View:



Source:

The screenshot shows the "ProductOrder.vb" code file in Visual Studio. The code defines a class named "ProductOrder" with a single method, "ProductOrder_Load", which handles the MyBase.Load event. The method contains a TODO comment about loading data into the "Product_Order" table. The code is written in VB.NET.

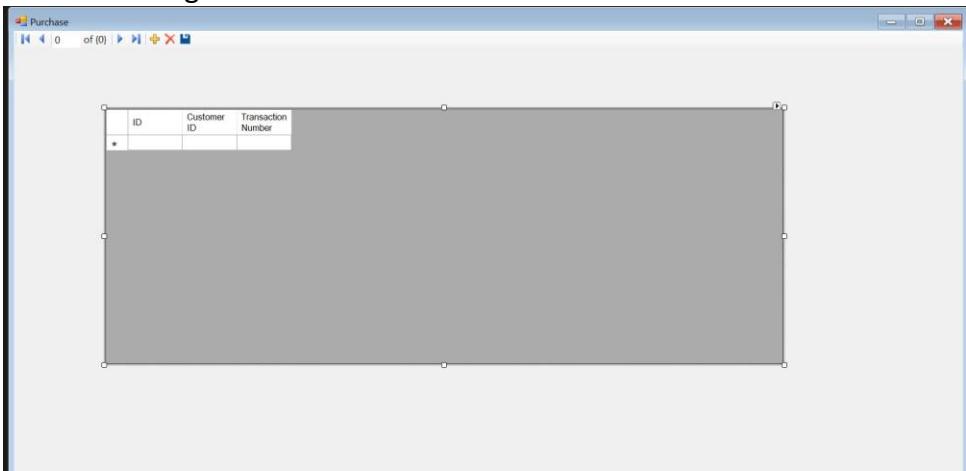
```
1  Public Class ProductOrder
2
3
4  Private Sub ProductOrder_Load(sender As Object, e As EventArgs) Handles MyBase.Load
5      'TODO: This line of code loads data into the 'Database111DataSet.Product_Order' table. You can move, or remove it, as needed.
6      Me.Product_OrderTableAdapter.Fill(Me.Database111DataSet.Product_Order)
7
8  End Sub
9  End Class
```

Product Order Output View:

The screenshot shows a Windows application window titled "ProductOrder". At the top, there is a toolbar with icons for back, forward, search, and other controls. Below the toolbar is a status bar showing "1 of 7". The main area contains a table with three columns: "Order ID", "Name_Prod.", and "Quantity". The table has seven rows of data. The first row is highlighted with a blue background. The entire application window is set against a light gray background.

	Order ID	Name_Prod.	Quantity
1	Prod1	5	
1	Prod2	6	
2	Prod2	3	
3	Prod3	4	
4	Prod4	3	
5	Prod1	5	
6	Prod2	3	
*			

Purchase Design View:



Code view:

```
Module MainForm
    Public Class Purchase
        References MyBase
        Private Sub Purchase_Load(sender As Object, e As EventArgs) Handles MyBase.Load
            'TODO: This line of code loads data into the 'Database111DataSet.Crop' table. You can move, or remove it, as needed.
            Me.PurchaseTableAdapter.Fill(Me.Database111DataSet.Purchase)
        End Sub
    End Class

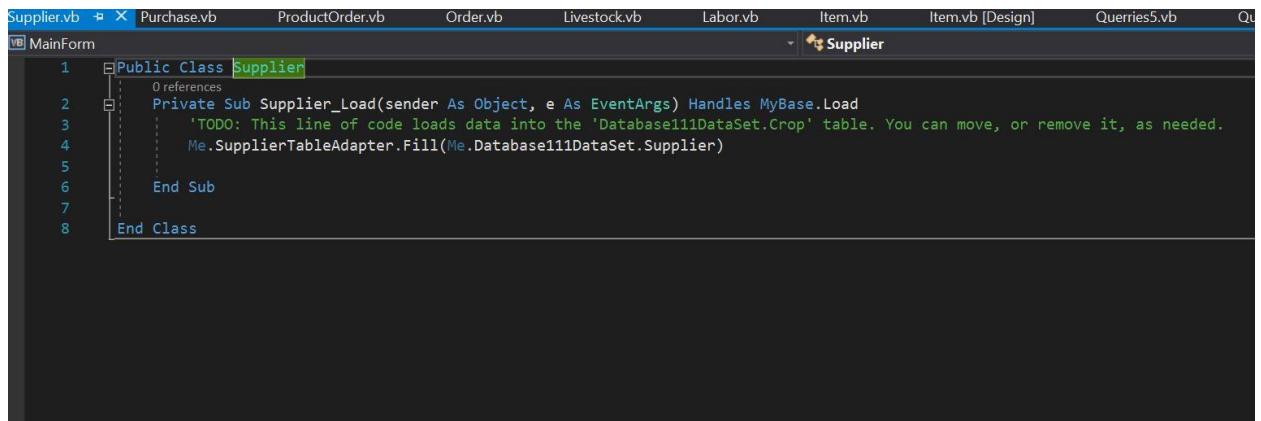
```

Purchase Output view:

The screenshot shows the same "Purchase" application window from the design view, but now it displays data in the DataGridView. The table has 10 rows of data, each with an ID, Customer ID, and Transaction Number. Row 1 is highlighted in blue.

	ID	Customer ID	Transaction Number
▶	1	1	1
	2	1	2
	3	2	1
	4	1	3
	5	3	3
	6	4	5
	7	2	3
	8	4	5
	9	5	4
	10	2	4

Supplier Design view:

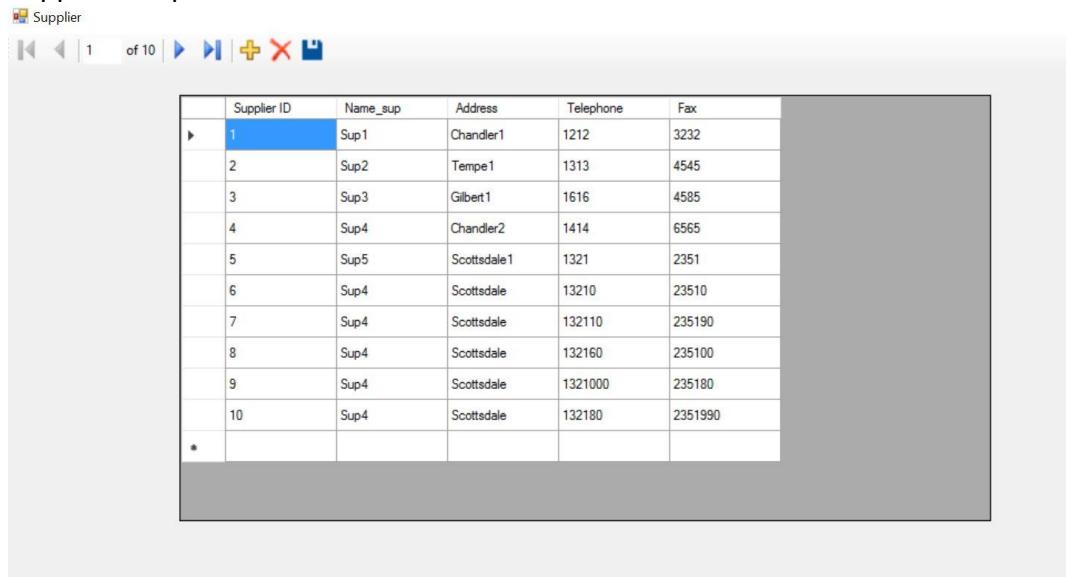


The screenshot shows the Visual Studio IDE with the code editor open. The tab bar at the top includes Supplier.vb, Purchase.vb, ProductOrder.vb, Order.vb, Livestock.vb, Labor.vb, Item.vb, Item.vb [Design], Querries5.vb, and Qu. The code editor window has a title bar labeled "Supplier". The code itself is as follows:

```
1  Public Class Supplier
2      0 references
3      Private Sub Supplier_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4          'TODO: This line of code loads data into the 'Database111DataSet.Crop' table. You can move, or remove it, as needed.
5          Me.SupplierTableAdapter.Fill(Me.Database111DataSet.Supplier)
6      End Sub
7
8  End Class
```

Code View:

Supplier Output:



The screenshot shows a data grid titled "Supplier" with 10 rows of data. The columns are labeled: Supplier ID, Name_sup, Address, Telephone, and Fax. The data is as follows:

	Supplier ID	Name_sup	Address	Telephone	Fax
▶	1	Sup1	Chandler1	1212	3232
	2	Sup2	Tempe1	1313	4545
	3	Sup3	Gilbert1	1616	4585
	4	Sup4	Chandler2	1414	6565
	5	Sup5	Scottsdale1	1321	2351
	6	Sup4	Scottsdale	13210	23510
	7	Sup4	Scottsdale	132110	235190
	8	Sup4	Scottsdale	132160	235100
	9	Sup4	Scottsdale	1321000	235180
	10	Sup4	Scottsdale	132180	2351990
*					

Transaction Design View:

The screenshot shows a Windows application window titled "Transaction". The interface includes a toolbar with icons for back, forward, search, and other file operations. Below the toolbar is a table with columns labeled: Transaction Number, Transaction Date, Quantity, Payment Date, Shipping Date, Unit Price, and Transaction year. A single row is present in the table, starting with an asterisk (*). The rest of the window is a large, empty gray area.

	Transaction Number	Transaction Date	Quantity	Payment Date	Shipping Date	Unit Price	Transaction year
*							

Code View:

The screenshot shows a Windows application window titled "MainForm". The code editor displays the following C# code for a class named "Transaction":

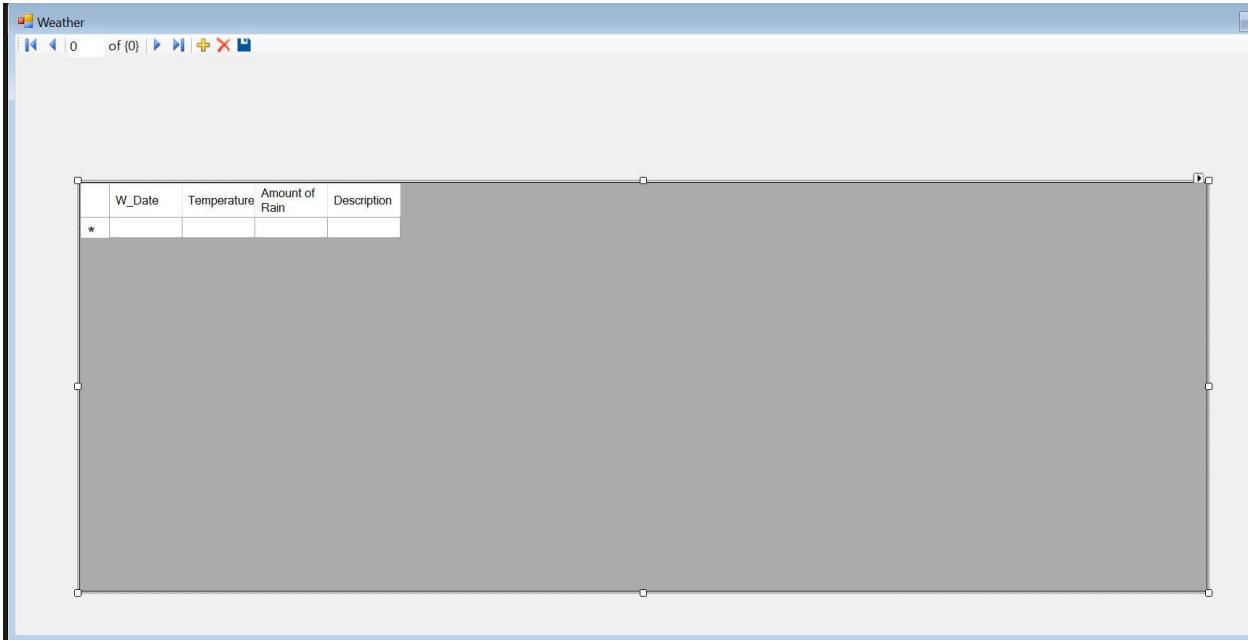
```
1  Public Class Transaction
2
3      References
4      Private Sub Transaction_Load(sender As Object, e As EventArgs) Handles MyBase.Load
5          'TODO: This line of code loads data into the 'Database11DataSet.Crop' table. You can move, or remove it, as needed.
6          Me.TransactionTableAdapter.Fill(\&lt;My>.Database11DataSet.Transaction)
7
8      End Sub
9
End Class
```

Transaction Output:

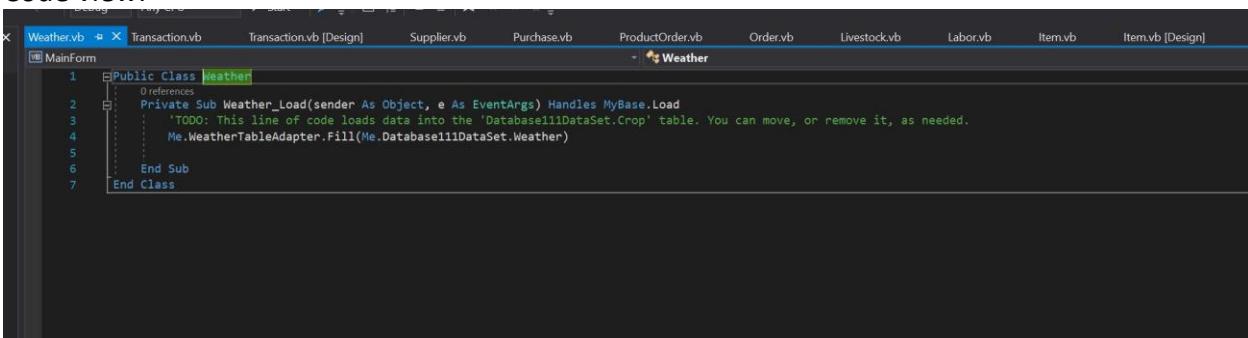
The screenshot shows a Windows application window titled "MainForm". The main content area displays a grid of transaction data. The columns are labeled: Transaction Number, Transaction Date, Quantity, Payment Date, Shipping Date, Unit Price, and Transaction year. The data rows are:

	Transaction Number	Transaction Date	Quantity	Payment Date	Shipping Date	Unit Price	Transaction year
▶	1	10/16/2018	100	10/15/2018	10/18/2018	20	2018
	2	10/15/2018	150	10/16/2018	10/17/2018	10	2018
	3	10/10/2017	80	10/16/2017	10/14/2017	60	2017
	4	10/9/2017	90	10/15/2017	10/18/2017	80	2017
	5	10/8/2018	50	10/8/2018	10/19/2018	92	2018
*							

Weather Design View;



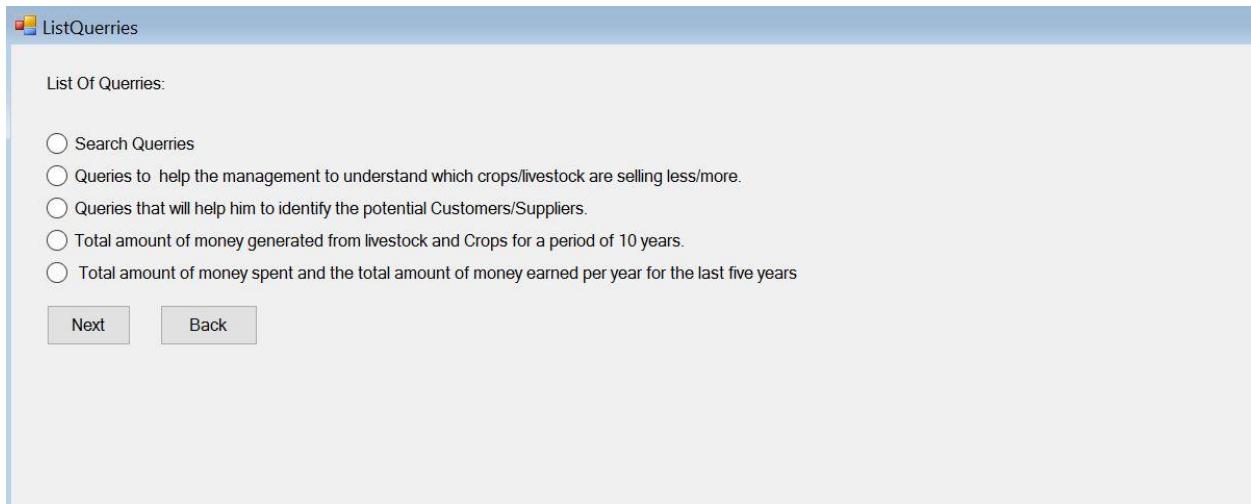
Code view:



Weather Output:

	W_Date	Temperature	Amount of Rain	Description
▶	10/8/2018	72	6	Rainy
	10/15/2018	85	40	Rainy
	10/16/2018	73	5	Rainy
	10/9/2017	34	89	Cloudy
	10/10/2017	78	90	Cloudy
*				

List of Queries:



```
1  ' reference
2  ' Public Class ListQuerries
3  '     0 references
4  '     Private Sub Label1_Click(sender As Object, e As EventArgs) Handles Label1.Click
5  '         End Sub
6  '
7  '     0 references
8  '     Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
9  '         If RadioButton1.Checked Then
10 '             Me.Hide()
11 '             SearchQuerries.Show()
12 '         ElseIf RadioButton2.Checked Then
13 '             Me.Hide()
14 '             Queries2.Show()
15 '         ElseIf RadioButton3.Checked Then
16 '             Me.Hide()
17 '             Queries3.Show()
18 '         ElseIf RadioButton4.Checked Then
19 '             Me.Hide()
20 '             Queries4.Show()
21 '         ElseIf RadioButton5.Checked Then
22 '             Me.Hide()
23 '             Queries5.Show()
24 '         End If
25 '
26 '     0 references
27 '     Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
28 '         Me.Hide()
29 '         Form1.Show()
30 '     End Sub
31 '
32 End Class
```

1a. Search Queries:

Name of a customer and his list of Purchases:

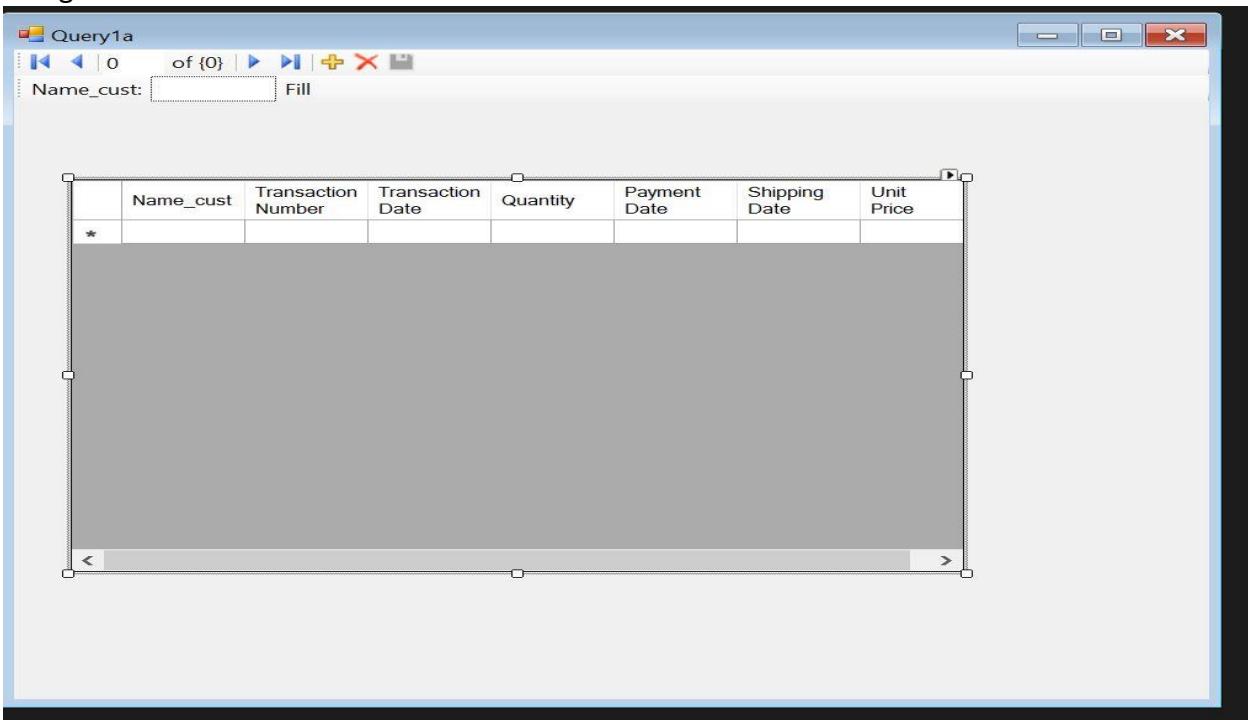
Query Builder

Column	Alias	Table	Outp...	Sort Type	Sort Order	Filter	Or...	Or...	Or...
Name_cust		Customer	<input checked="" type="checkbox"/>			= ?			
[Transaction N...		[Transaction]	<input checked="" type="checkbox"/>						
[Transaction D...		[Transaction]	<input checked="" type="checkbox"/>						
Quantity		[Transaction]	<input checked="" type="checkbox"/>						
[Payment Date]		[Transaction]	<input checked="" type="checkbox"/>						

1a. SQL code:

```
SELECT Customer.Name_cust, [Transaction].[Transaction Number], [Transaction].[Transaction Date],
[Transaction].Quantity, [Transaction].[Payment Date], [Transaction].[Shipping Date], [Transaction].[Unit Price]
FROM ((Customer INNER JOIN
Purchase ON Customer.[Customer ID] = Purchase.[Customer ID]) INNER JOIN
[Transaction] ON Purchase.[Transaction Number] = [Transaction].[Transaction Number])
WHERE (Customer.Name_cust = ?)
```

Design View:



Code view:

```
1  Public Class Query1a
2      References
3      Private Sub FillToolStripButton_Click(sender As Object, e As EventArgs) Handles FillToolStripButton.Click
4          Try
5              Me.Querry1aTableAdapter.Fill(Me.Database111DataSet.Querry1a, Name_custToolStripTextBox.Text)
6          Catch ex As System.Exception
7              System.Windows.Forms.MessageBox.Show(ex.Message)
8          End Try
9      End Sub
10 
```

Output:

Query1a

Name_cust: Rhituraj Fill

	Name_cust	Transaction Number	Transaction Date	Quantity	Payment Date	Shipping Date	Unit Price
▶	Rhituraj	3	10/10/2017	80	10/16/2017	10/14/2017	60
*							

1b.

The name of Supplier and returns list of its outstanding orders:

Query Builder

Tables:

- Order: [Release Date], [Amount Paid], [Actual Delivery Date], [Expected Date], [Payment Date]
- Product Order: [* (All Columns), Order ID, Name_Product, Quantity]
- Supplier: [Supplier ID], [Name_sup], [Address], [Telephone], [Fax]

Results Grid:

Column	Alias	Table	Outp...	Sort Type	Sort Order	Filter	Or...	Or...	Or...
[Payment Date]		[Order]	<input checked="" type="checkbox"/>			>= ?			
[Actual Deliver...		[Order]	<input checked="" type="checkbox"/>						

```

SELECT Supplier.Name_sup, [Order].[Release Date], [Order].[Amount Paid], [Product Order].Name_Product, [Product Order].Quantity, [Order].[Payment Date], [Order].[Actual Delivery Date]
FROM (((Order) INNER JOIN
    [Product Order] ON [Order].Order_ID = [Product Order].[Order ID]) INNER JOIN
    Supplier ON [Order].[Supplier ID] = Supplier.[Supplier ID])
WHERE (Supplier.Name_sup = ?) AND (([Order].[Payment Date] >= ?))

```

SQL View:

```
SELECT Supplier.Name_sup, [Order].[Release Date], [Order].[Amount Paid], [Product Order].Name_Product, [Product Order].Quantity, [Order].[Payment Date], [Order].[Actual Delivery Date]
FROM (([Order] INNER JOIN
      [Product Order] ON [Order].Order_ID = [Product Order].[Order ID]) INNER JOIN
      Supplier ON [Order].[Supplier ID] = Supplier.[Supplier ID])
WHERE (Supplier.Name_sup = ?) AND ([Order].[Payment Date] >= ?)
```

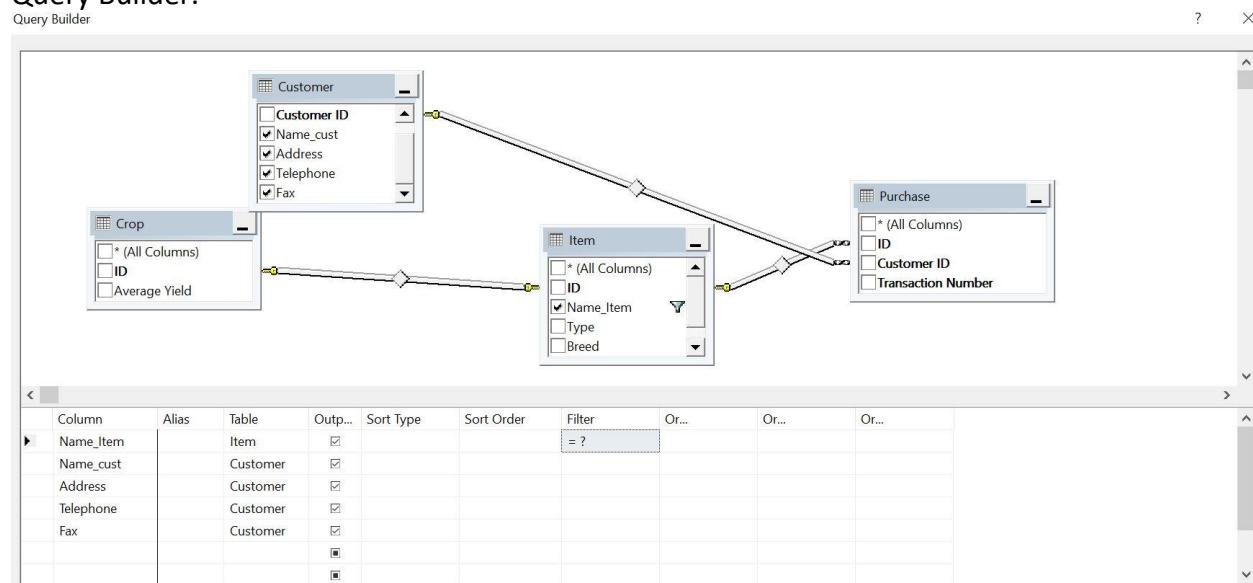
Code View:

```
Public Class Query1b
    References
    Private Sub FillToolStripButton_Click(sender As Object, e As EventArgs) Handles FillToolStripButton.Click
        Try
            Me.Query1bTableAdapter.Fill(Me.Database111DataSet.Query1b, Name_supToolStripTextBox.Text, New System.Nullable(Of Date)(CType(Payment_DateToolStripTextBox.Text, Date)))
        Catch ex As System.Exception
            System.Windows.Forms.MessageBox.Show(ex.Message)
        End Try
    End Sub
End Class
```

1c.

The name of the Crop and returns list of customers who have purchased.

Query Builder.



SQL VIEW:

What data should be loaded into the table?

```
SELECT Item.Name_Item, Customer.Name_cust, Customer.Address, Customer.Telephone, Customer.Fax
FROM (((Crop INNER JOIN
      Item ON Crop.ID = Item.ID) INNER JOIN
      Purchase ON Item.ID = Purchase.ID) INNER JOIN
      Customer ON Purchase.[Customer ID] = Customer.[Customer ID])
WHERE (Item.Name_Item = ?)
```

Design View:

The screenshot shows the Microsoft Query Designer window titled "Query1c". The table has the following structure:

	Name_Item	Name_cust	Address	Telephone	Fax
*					

Code View:

```
Public Class query1c
    Private Sub FillToolStripButton_Click(sender As Object, e As EventArgs) Handles FillToolStripButton.Click
        Try
            Me.Query_1CTableAdapter.Fill(Me.Database111DataSet.Query_1C, Name_ItemToolStripTextBox.Text)
        Catch ex As System.Exception
            System.Windows.Forms.MessageBox.Show(ex.Message)
        End Try
    End Sub
End Class
```

Output:

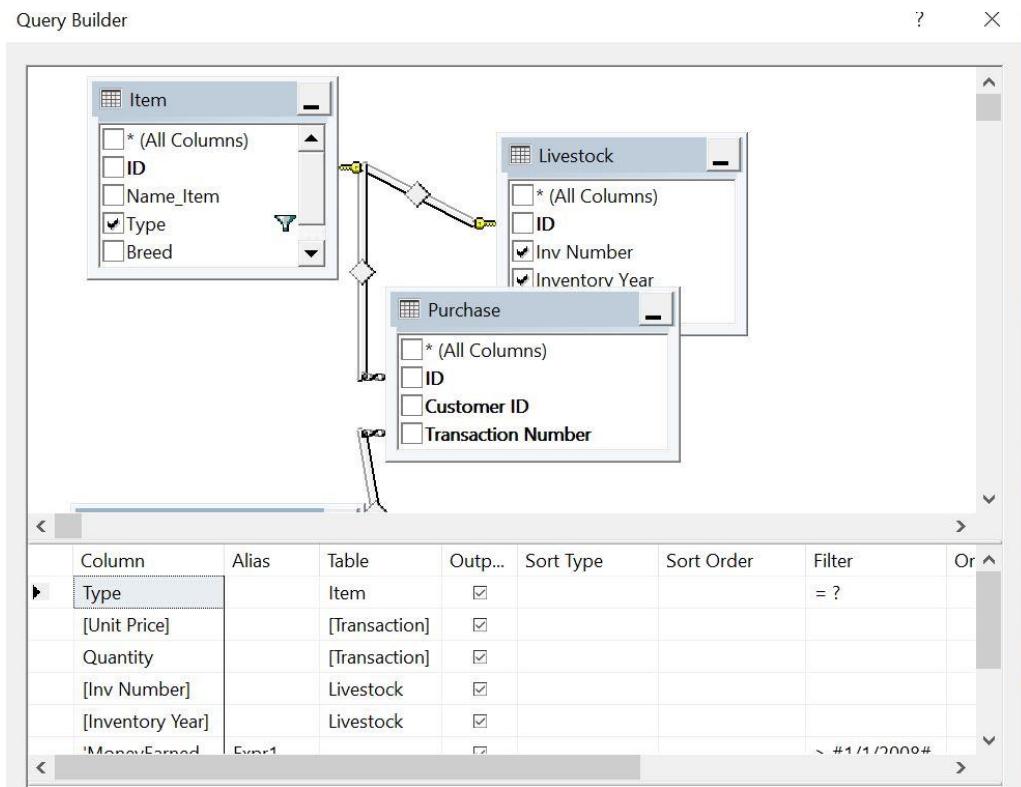
Query1c

Name_Item: Item3 Fill

	Name_Item	Name_cust	Address	Telephone	Fax
▶	Item3	Lily	Tempe2	2222	222
*					

1D.

The name of the Live Stock and returns list of customers who have purchased.



SQL VIEW:

```
SELECT Item.Type, [Transaction].[Unit Price], [Transaction].Quantity, Livestock.[Inv Number], Livestock.[Inventory Year], 'MoneyEarned: [Unit Price]*[Quantity]' AS Expr1
FROM (((Item INNER JOIN
Livestock ON Item.ID = Livestock.ID) INNER JOIN
Purchase ON Item.ID = Purchase.ID) INNER JOIN
[Transaction] ON Purchase.[Transaction Number] = [Transaction].[Transaction Number])
WHERE (Item.Type = ?) AND ('MoneyEarned: [Unit Price]*[Quantity]' > #1/1/2008#)
```

Code View:

```
MainForm
1  Public Class Query1D
2    Private Sub FillToolStripButton_Click(sender As Object, e As EventArgs) Handles FillToolStripButton.Click
3      Try
4        Me.Query1DTableAdapter.Fill(Me.Database111DataSet.Query1D, TypeToolStripTextBox.Text)
5      Catch ex As System.Exception
6        System.Windows.Forms.MessageBox.Show(ex.Message)
7      End Try
8    End Sub
9  End Class
10 
```

Design View:

The screenshot shows a Windows application window titled "Query1D". At the top, there is a toolbar with icons for back, forward, search, and other database operations. Below the toolbar, the status bar displays "0 of 0" and "Fill". The main area contains a DataGridView control with the following columns and data:

Type	Unit Price	Quantity	Inv Number	Inventory Year	Expr1
*					

Output:

The screenshot shows a software window with a toolbar at the top containing icons for back, forward, search, and file operations. Below the toolbar, there are two buttons: 'Type: Livestock' and 'Fill'. The main area displays a table with the following data:

Type	Unit Price	Quantity	Inv Number	Inventory Ye
Livestock	92	50	50	7/3/2011
Livestock	60	80	150	7/4/2010
Livestock	92	50	60	7/7/2013
Livestock	80	90	12	7/9/2008
Livestock	80	90	68	7/9/2007
*				

1E.

This query prompts for the name of an item (livestock or crop) and return a list of the Suppliers that provide this item

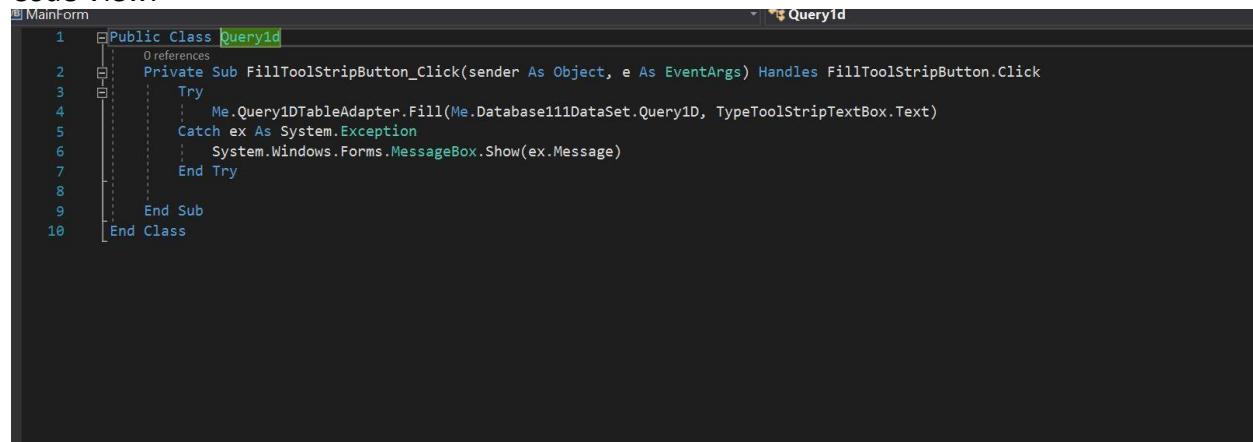
The screenshot shows the 'Query Builder' window. On the left, there are two tables listed: 'Item' and 'Purchase'. The 'Item' table has columns: * (All Columns), ID, Name_Item (selected), Type, and Breed. The 'Purchase' table has columns: Name_Item, Name_sup, and Address. The main pane displays the query setup:

Column	Alias	Table	Outp...	Sort Type	Sort Order	Filter	Or
Name_Item		Item	<input checked="" type="checkbox"/>			= ?	<input checked="" type="checkbox"/>
Name_sup		Supplier	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Address		Supplier	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>

1e.SQL View:

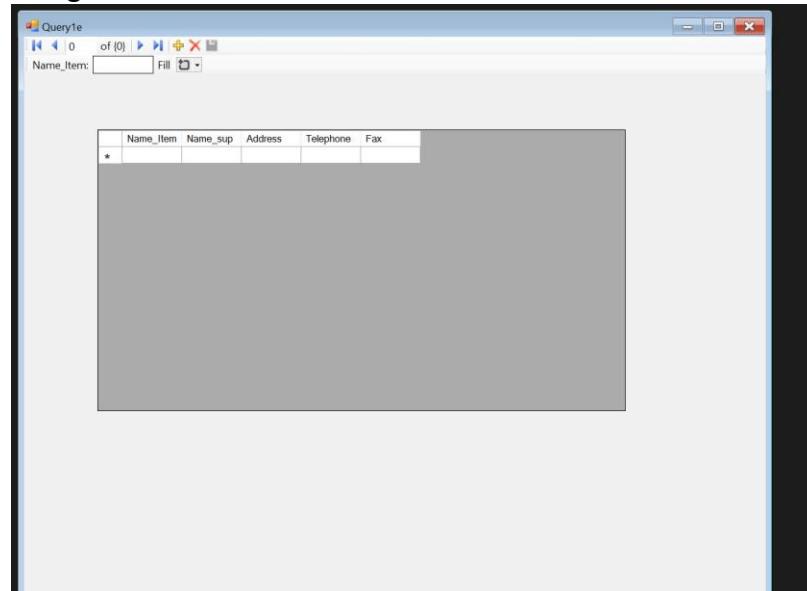
```
SELECT Item.Name_Item, Supplier.Name_sup, Supplier.Address, Supplier.Telephone, Supplier.Fax
FROM (((Item INNER JOIN
Purchase ON Item.ID = Purchase.ID) INNER JOIN
[Order] ON Purchase.ID = [Order].Order_ID) INNER JOIN
Supplier ON [Order].[Supplier ID] = Supplier.[Supplier ID])
WHERE (Item.Name_Item = ?)
```

Code View:



```
1  Public Class QueryId
2  {
3      References
4      Private Sub FillToolStripButton_Click(sender As Object, e As EventArgs) Handles FillToolStripButton.Click
5          Try
6              Me.Query1DataTableAdapter.Fill(Me.Database111DataSet.Query1D, TypeToolStripTextBox.Text)
7          Catch ex As System.Exception
8              System.Windows.Forms.MessageBox.Show(ex.Message)
9          End Try
10     End Sub
11 }
```

Design View:



Output:

	Name_Item	Name_sup	Address	Telephone	Fax
▶	Item3	Sup2	Tempe1	1313	4545
*					

Query 2a.

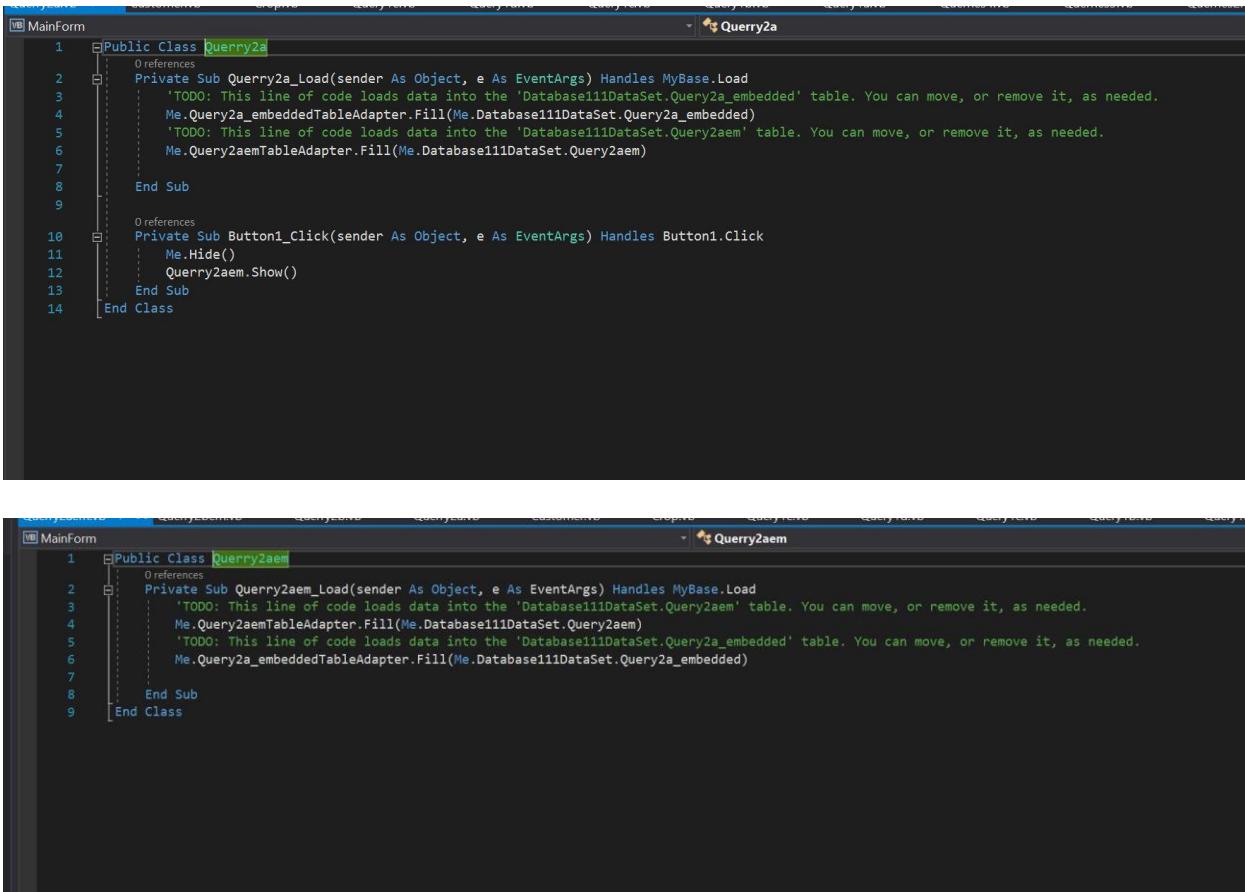
List the five crops that have generated the highest income in last year

Design View:

	Name_Item	Income	Transaction Date
▶	Item1	2000	10/16/2018
	Item2	1500	10/15/2018
	Item3	2000	10/16/2018
*			

Next

Code View:



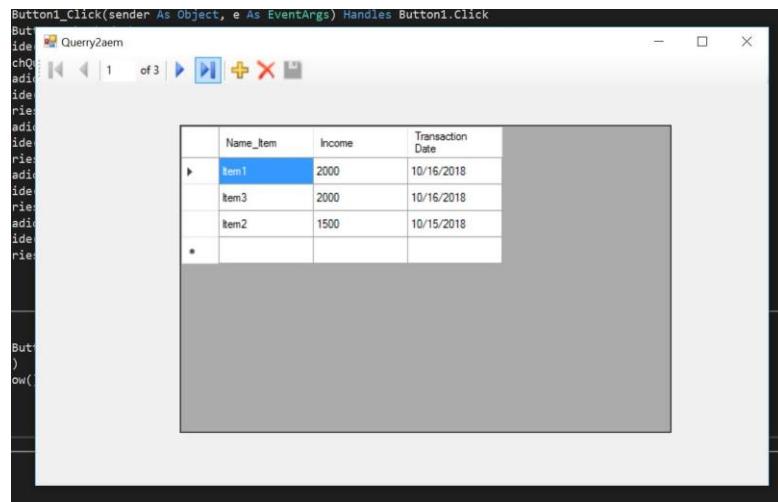
The image shows two side-by-side code editors in a development environment. Both editors have a dark theme and are titled 'MainForm'. The top editor is for the 'Query2a' class, and the bottom editor is for the 'Query2aem' class. Both classes contain a single method: 'Query2a_Load' and 'Button1_Click' respectively. The code includes TODO comments and database adapter fills.

```
VB MainForm
1  Public Class Query2a
2    ' References
3    Private Sub Query2a_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4      'TODO: This line of code loads data into the 'Database111DataSet.Query2a_embedded' table. You can move, or remove it, as needed.
5      Me.Query2a_embeddedTableAdapter.Fill(Me.Database111DataSet.Query2a_embedded)
6      'TODO: This line of code loads data into the 'Database111DataSet.Query2aem' table. You can move, or remove it, as needed.
7      Me.Query2aemTableAdapter.Fill(Me.Database111DataSet.Query2aem)
8    End Sub
9
10   ' References
11   Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
12     Me.Hide()
13     Query2aem.Show()
14   End Sub
15 End Class
```



```
VB MainForm
1  Public Class Query2aem
2    ' References
3    Private Sub Query2aem_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4      'TODO: This line of code loads data into the 'Database111DataSet.Query2aem' table. You can move, or remove it, as needed.
5      Me.Query2aemTableAdapter.Fill(Me.Database111DataSet.Query2aem)
6      'TODO: This line of code loads data into the 'Database111DataSet.Query2a_embedded' table. You can move, or remove it, as needed.
7      Me.Query2a_embeddedTableAdapter.Fill(Me.Database111DataSet.Query2a_embedded)
8    End Sub
9  End Class
```

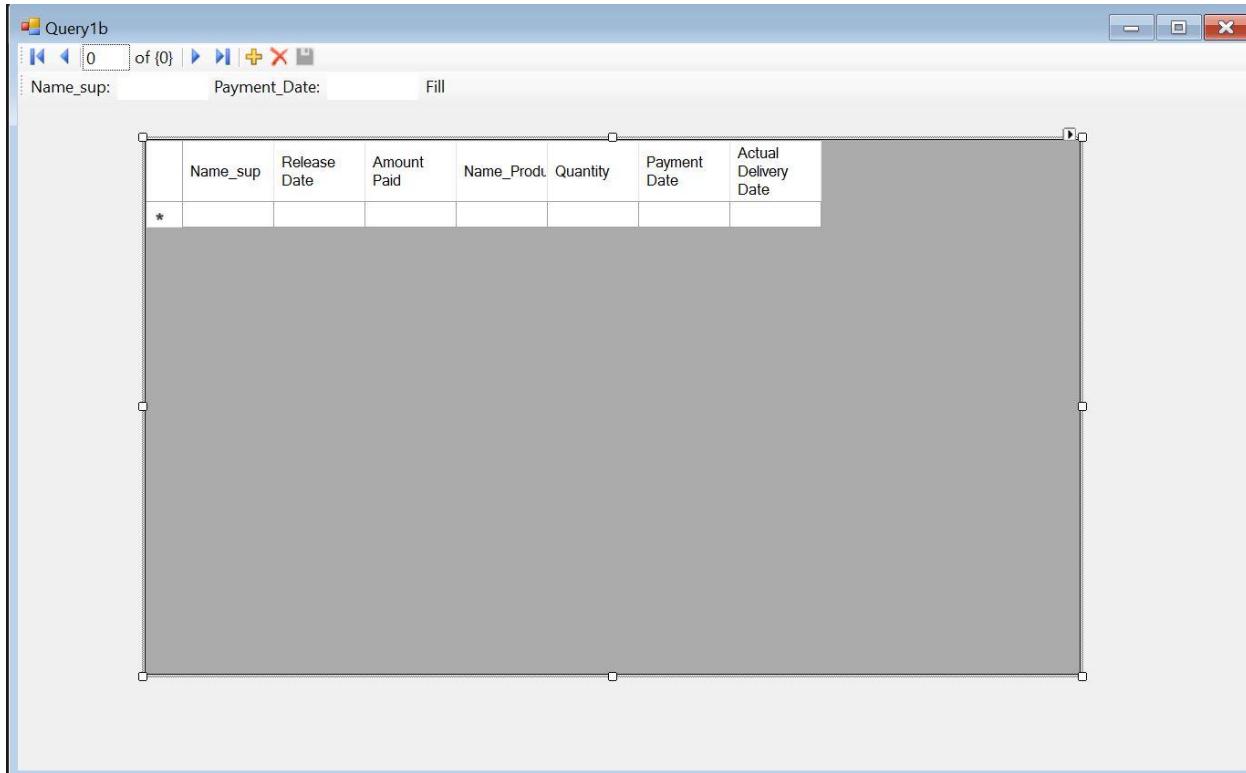
Output:



Query 2b.

Design View:

2.b List the five livestock that have generated the highest income in the last year.



Code View:

The code view displays two classes: 'Query2b' and 'Query2bem'. Both classes are defined within the 'MainForm' module.

```
Public Class Query2b
    References
    Private Sub Query2b_Load(sender As Object, e As EventArgs) Handles MyBase.Load
        'TODO: This line of code loads data into the 'Database11DataSet.Query2b_embedded' table. You can move, or remove it, as needed.
        Me.Query2b_embeddedTableAdapter.Fill(Me.Database11DataSet.Query2b_embedded)
        'TODO: This line of code loads data into the 'Database11DataSet.Query2b_eam' table. You can move, or remove it, as needed.
        Me.Query2b_eamTableAdapter.Fill(Me.Database11DataSet.Query2b_eam)
    End Sub
End Class
```



```
Public Class Query2bem
    References
    Private Sub Query2bem_Load(sender As Object, e As EventArgs) Handles MyBase.Load
        'TODO: This line of code loads data into the 'Database11DataSet.Query2b_eam' table. You can move, or remove it, as needed.
        Me.Query2b_eamTableAdapter.Fill(Me.Database11DataSet.Query2b_eam)
    End Sub
End Class
```

Output:

	Name_Item	MoneyEarned	Transaction Date
▶	Item6	4600	10/8/2018
	Item8	4600	10/8/2018
*			

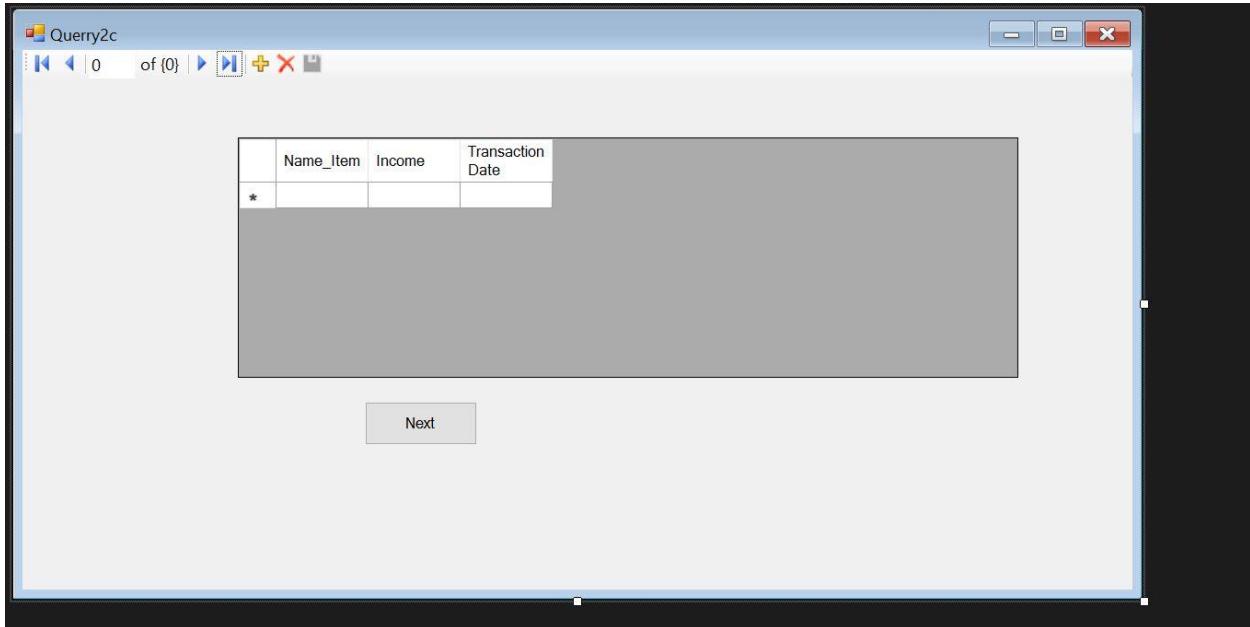
Next

	Name_Item	MoneyEarned	Transaction Date
▶	Item6	4600	10/8/2018
	Item8	4600	10/8/2018
*			

2c.

2.c Find the crop that has generated the lowest income in the last year.

Design View:

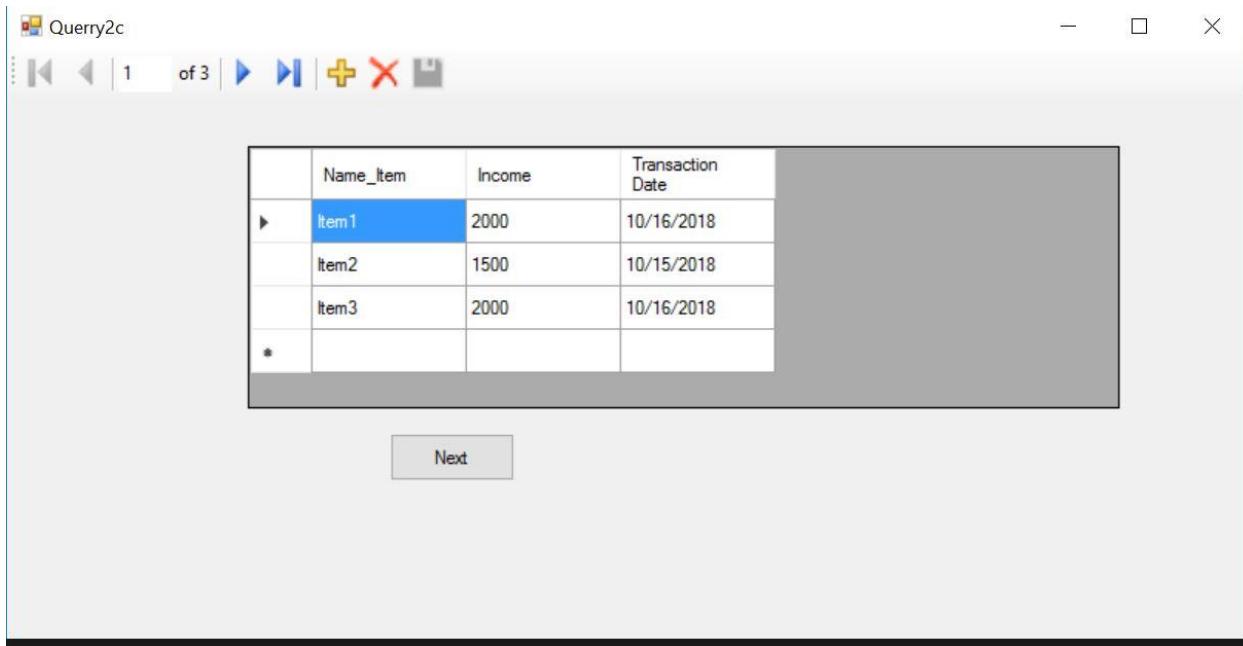


Code View:

```
MainForm
1  Public Class Querry2c
2  End Class
3  Private Sub Querry2c_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4  End Sub
5  Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
6  End Sub
7  End Class
```

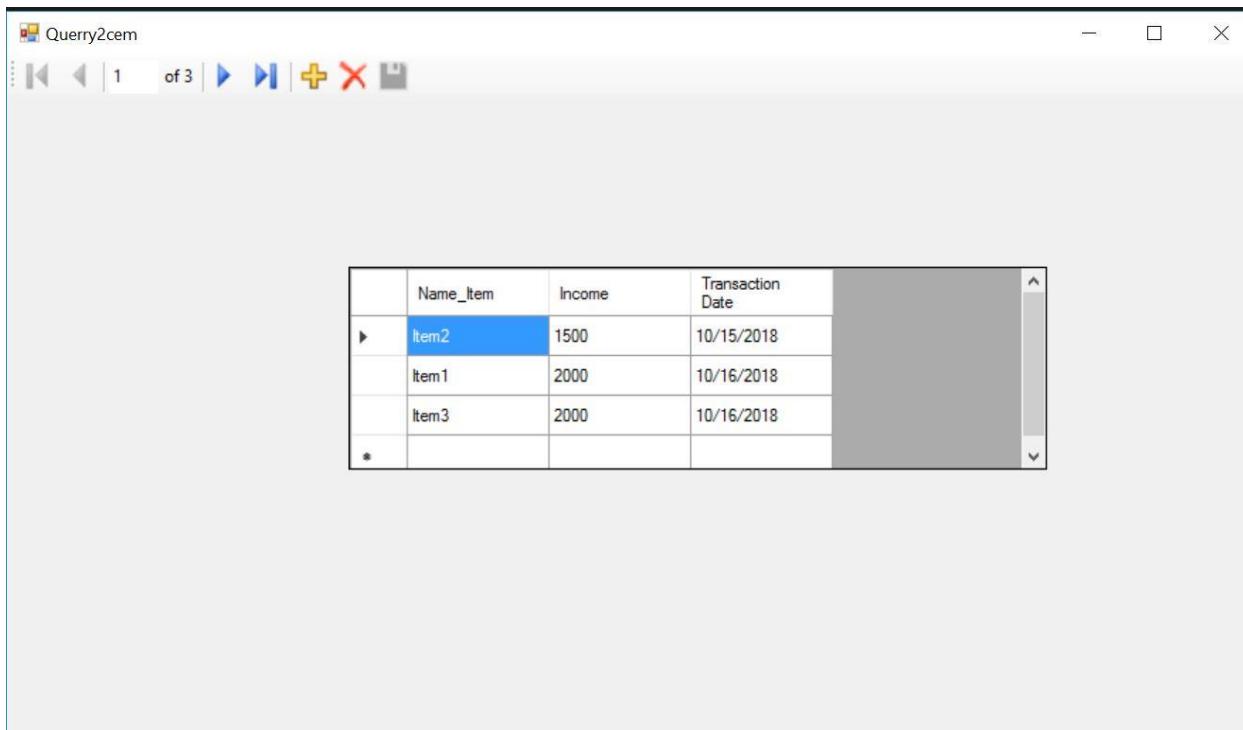
```
Query2cem.vb
MainForm
1  Public Class Querry2cem
2  End Class
3  Private Sub Querry2cem_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4  End Sub
5  Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
6  End Sub
7  End Class
```

Output:



The screenshot shows a Windows application window titled "Query2c". At the top, there is a toolbar with icons for back, forward, search, and other operations. Below the toolbar, the status bar displays "1 of 3". The main area contains a table with four columns: "Name_Item", "Income", and "Transaction Date". There are three rows of data: "Item1" (selected), "Item2", and "Item3". A "Next" button is located at the bottom left of the table area.

	Name_Item	Income	Transaction Date
▶	Item1	2000	10/16/2018
	Item2	1500	10/15/2018
	Item3	2000	10/16/2018
*			



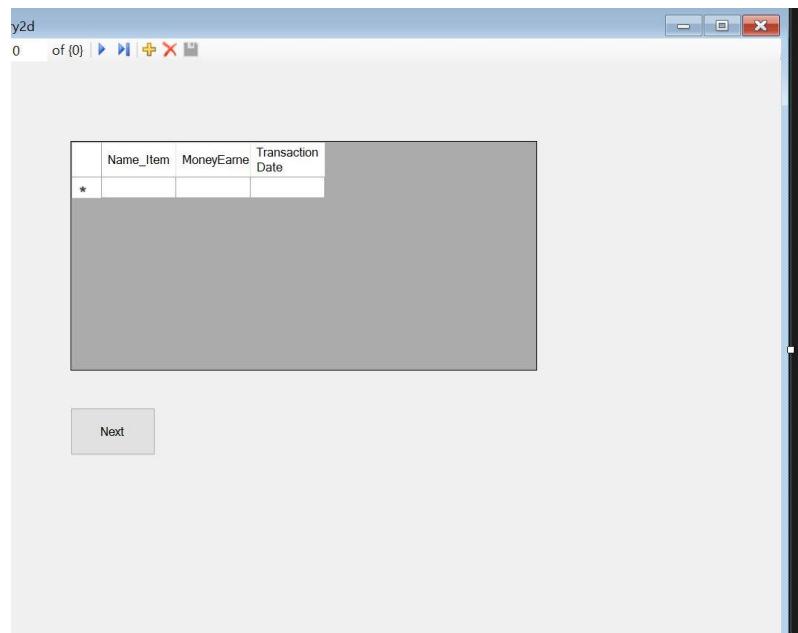
The screenshot shows a Windows application window titled "Query2cem". At the top, there is a toolbar with icons for back, forward, search, and other operations. Below the toolbar, the status bar displays "1 of 3". The main area contains a table with four columns: "Name_Item", "Income", and "Transaction Date". There are four rows of data: "Item2" (selected), "Item1", "Item3", and an empty row marked with an asterisk (*). A vertical scroll bar is visible on the right side of the table area.

	Name_Item	Income	Transaction Date
▶	Item2	1500	10/15/2018
	Item1	2000	10/16/2018
	Item3	2000	10/16/2018
*			

2d

Find the livestock that has generated the lowest income in the last year.

Design View:



Code View:

```
1  Public Class Querry2d
2      References
3      Private Sub Querry2d_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4          'TODO: This line of code loads data into the 'Database111DataSet.Query2dem' table. You can move, or remove it, as needed.
5          Me.Query2demTableAdapter.Fill(Me.Database111DataSet.Query2dem)
6
7      End Sub
8
9      References
10     Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
11         Me.Hide()
12         Querry2dem.Show()
13     End Sub
14 End Class
```

```
1  Public Class Querry2dem
2      References
3      Private Sub Querry2dem_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4          'TODO: This line of code loads data into the 'Database111DataSet.Query2d' table. You can move, or remove it, as needed.
5          Me.Query2dTableAdapter.Fill(Me.Database111DataSet.Query2d)
6
7      End Sub
8 End Class
```

Output:

Query2d

◀ | 1 of 2 | ▶ | + | X | ↗

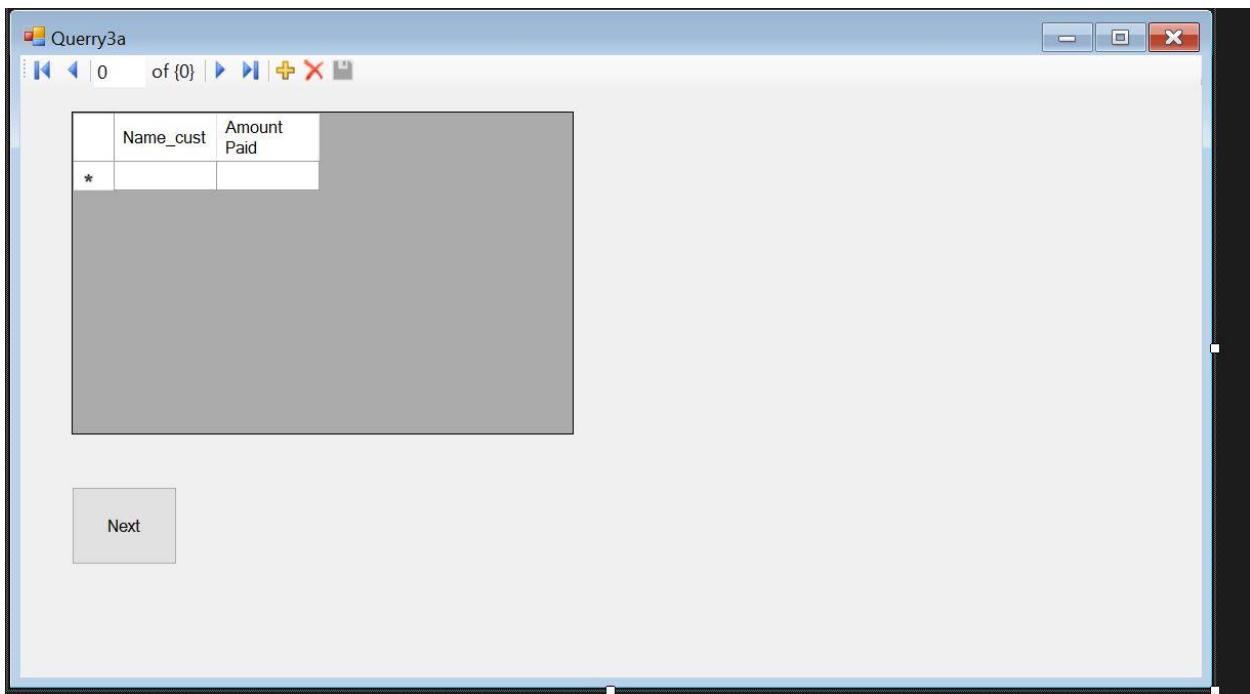
	Name_Item	MoneyEarned	Transaction Date	
▶	Item6	4600	10/8/2018	
	Item8	4600	10/8/2018	
*				

Next

3a.

3a.Five Customers that have purchased the most

Design View:



Code View:

```
VB MainForm
1  Public Class Querry3a
2      0 references
3      Private Sub Querry3a_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4          'TODO: This line of code loads data into the 'Database111DataSet.Querry3a' table. You can move, or remove it, as needed.
5          Me.Querry3aTableAdapter.Fill(Me.Database111DataSet.Querry3a)
6      End Sub
7
8      0 references
9      Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
10         Me.Hide()
11         Querry3aem.Show()
12     End Sub
13 End Class
```

Output:

Querry3a

◀ ▶ | 1 of 5 | + X

	Name_cust	Amount Paid
▶	Daron	50
	Daron	60
	Lily	80
	Susan	20
	Susan	30
*		

Next

Querry3aem

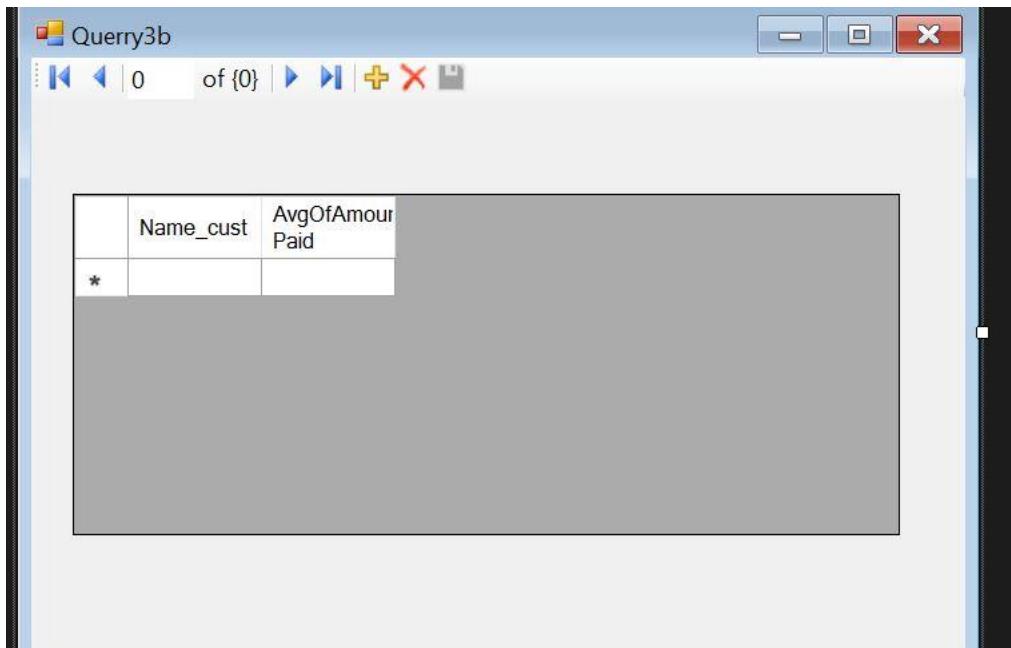
◀ ▶ | 1 of 3 | + X

	Name_cust	SumOfAmount Paid
▶	Daron	110
	Lily	80
	Susan	50
*		

3b.

Five Customers that have purchased the most in last Five Years

Design View:



Code View:

A screenshot of the Visual Studio code editor showing the "Querry3b.vb" file. The code defines a public class named "Querry3b" with one method: "Querry3b_Load". The method is triggered by the "Load" event of the form. It contains a single line of code: "Me.Query3bTableAdapter.Fill(Me.Database111DataSet.Query3b)". A note in the code states: "'TODO: This line of code loads data into the 'Database111DataSet.Query3b' table. You can move, or remove it, as needed.'".

```
1  Public Class Querry3b
2      ' References
3      Private Sub Querry3b_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4          'TODO: This line of code loads data into the 'Database111DataSet.Query3b' table. You can move, or remove it, as needed.
5          Me.Query3bTableAdapter.Fill(Me.Database111DataSet.Query3b)
6      End Sub
7  End Class
```

Output:

The screenshot shows a software interface titled "Query3b". At the top, there are navigation buttons: back, forward, first, last, and a refresh icon. Below the buttons is a table with three rows. The columns are labeled "Name_cust" and "AvgOfAmount Paid". The data rows are: "Lily" with value "80", "Daron" with value "55", and "Susan" with value "25". A fourth row, starting with an asterisk (*), is present but empty.

	Name_cust	AvgOfAmount Paid
▶	Lily	80
	Daron	55
*	Susan	25

Query 3c:

Five Supplier from which the company has purchased the most

Design View:

The screenshot shows a software interface titled "Query3c". At the top, there are navigation buttons: back, forward, first, last, and a refresh icon. Below the buttons is a table with one row. The columns are labeled "Name_sup" and "Amount Paid". The data row is an asterisk (*) with both columns empty. A "Next" button is located at the bottom left of the main window area.

	Name_sup	Amount Paid
*		

Code View:

```
1  MainForm
2  Public Class Querry3c
3      0 references
4      Private Sub Querry3c_Load(sender As Object, e As EventArgs) Handles MyBase.Load
5          'TODO: This line of code loads data into the 'Database111DataSet.Query3c' table. You can move, or remove it, as needed.
6          Me.Query3cTableAdapter.Fill(Me.Database111DataSet.Query3c)
7
8      End Sub
9
10     0 references
11     Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
12         Me.Hide()
13         Querry3cem.Show()
14
15     End Sub
16
17     End Class
```

```
1  MainForm
2  Public Class Querry3cem
3      0 references
4      Private Sub Querry3cem_Load(sender As Object, e As EventArgs) Handles MyBase.Load
5          'TODO: This line of code loads data into the 'Database111DataSet.Query3c1' table. You can move, or remove it, as needed.
6          Me.Query3c1TableAdapter.Fill(Me.Database111DataSet.Query3c1)
7
8      End Sub
9
10     End Class
```

Output:

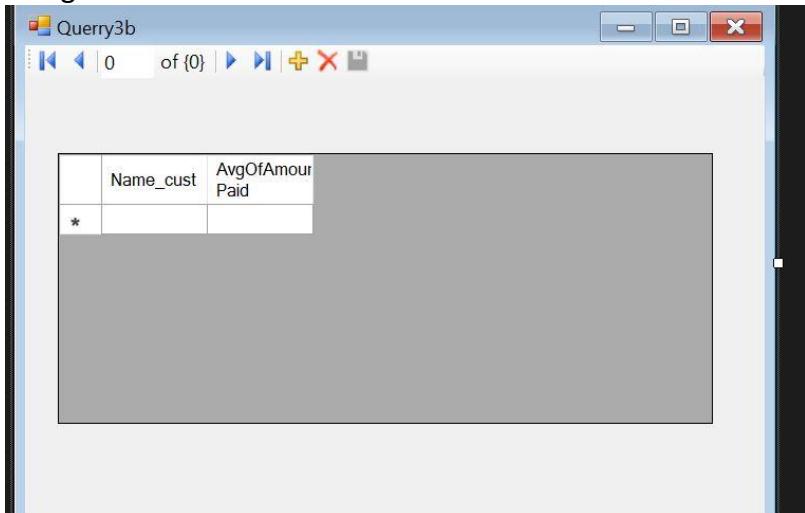
The output window displays a grid of data with two columns: 'Name_sup' and 'AvgOfAmount Paid'. The data rows are:

	Name_sup	AvgOfAmount Paid
▶	Sup1	25
	Sup2	80
	Sup4	60
	Sup5	50
*		

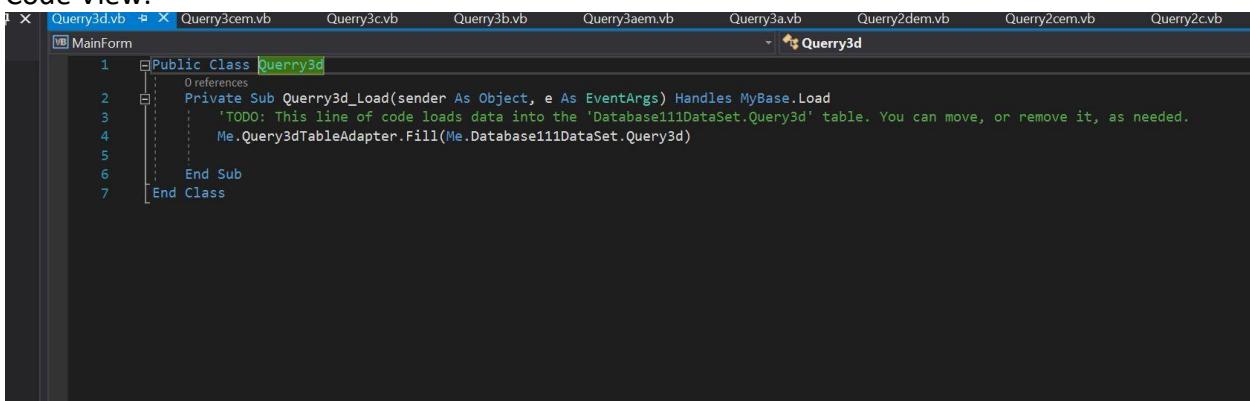
Query 3d

3d. Five Suppliers from whom company has purchased the most in five years.

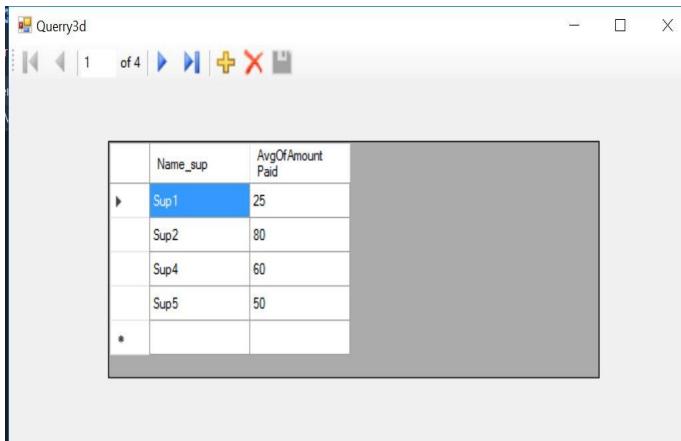
Design View:



Code View:



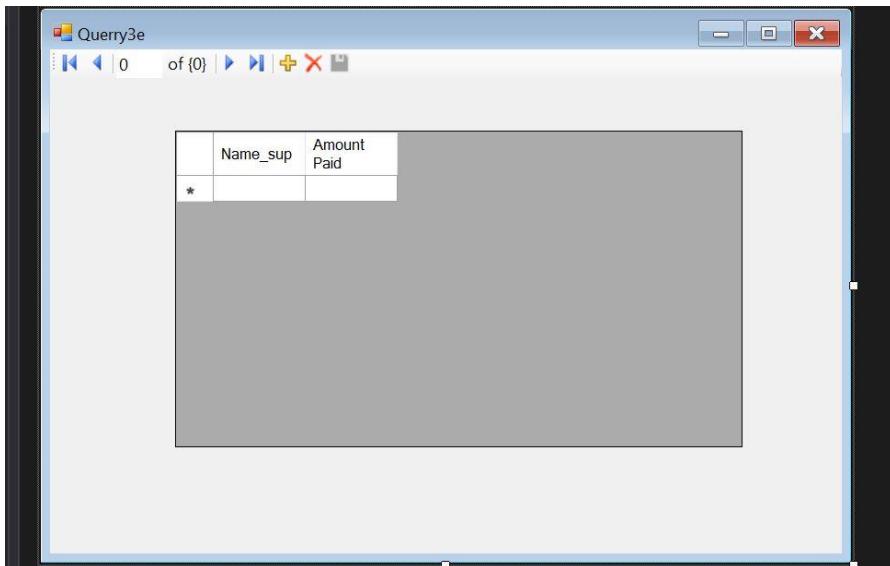
Output:



3e.

List the Suppliers that have a late shipment during last year

Design View:



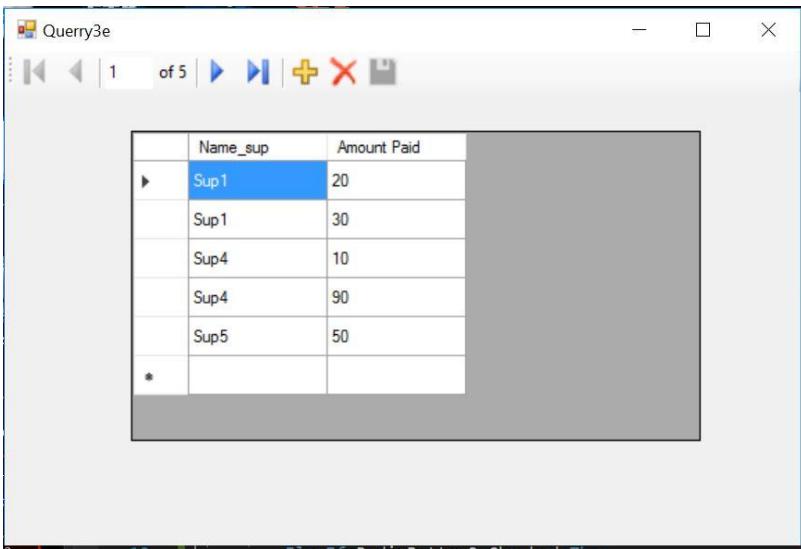
Code View:

A screenshot of the Visual Studio code editor showing the "MainForm.vb" file. The code is written in VB.NET. It defines a class named "Querry3e" with one member method, "Querry3e_Load".

```
1  Public Class Querry3e
2      ' References
3      Private Sub Querry3e_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4          'TODO: This line of code loads data into the 'Database111DataSet.Querry3e' table. You can move, or remove it, as needed.
5          Me.Querry3eTableAdapter.Fill(Me.Database111DataSet.Querry3e)
6      End Sub
7  End Class
```

The code editor interface shows tabs for other files like "Querry3e.vb", "Querry3e.Designer.vb", etc., at the top. The code is syntax-highlighted in blue and black.

Output:

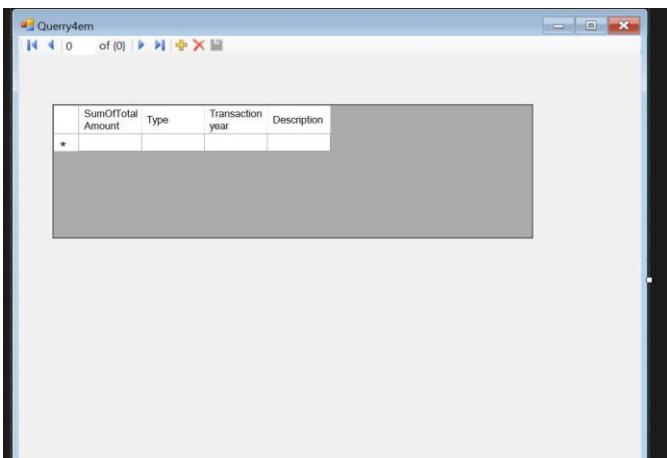


The screenshot shows a Windows application window titled "Query3e". At the top, there is a toolbar with icons for back, forward, search, and other controls. Below the toolbar is a status bar showing "of 5". The main area contains a grid table with two columns: "Name_sup" and "Amount Paid". The data rows are:

	Name_sup	Amount Paid
▶	Sup1	20
	Sup1	30
	Sup4	10
	Sup4	90
	Sup5	50
*		

4.

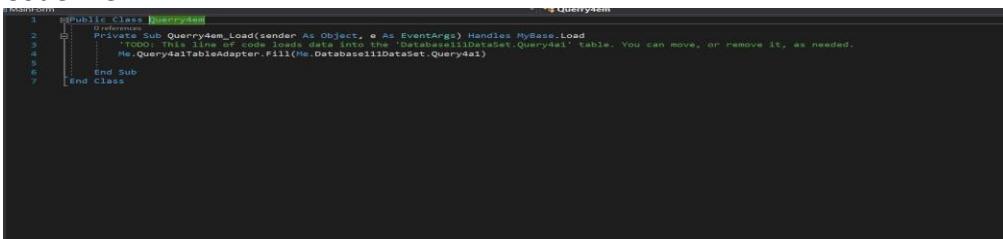
Design View:



The screenshot shows a Windows application window titled "Query4em". At the top, there is a toolbar with icons for back, forward, search, and other controls. Below the toolbar is a status bar showing "of {0}". The main area contains a grid table with four columns: "SumOfTotal", "Type", "Transaction", and "year". The data rows are:

	SumOfTotal	Type	Transaction	year
*				

Code View:



```
1  Public Class Query4em
2      End Class
3
4      Private Sub Query4em_Load(sender As Object, e As EventArgs) Handles MyBase.Load
5          TODO: This line of code loads data into the 'Database11DataSet.Query4ai' table. You can move, or remove it, as needed.
6          Me.Query4aiTableAdapter.Fill(Me.Database11DataSet.Query4ai)
7
8      End Sub
9  
```

Output:

Querries4

1 of 6

Next

	Total Amount	Type	Transaction year	Description
▶	1500	Crop	2018	Rainy
	2000	Crop	2018	Rainy
	4600	Livestock	2018	Rainy
	4800	Crop	2017	Cloudy

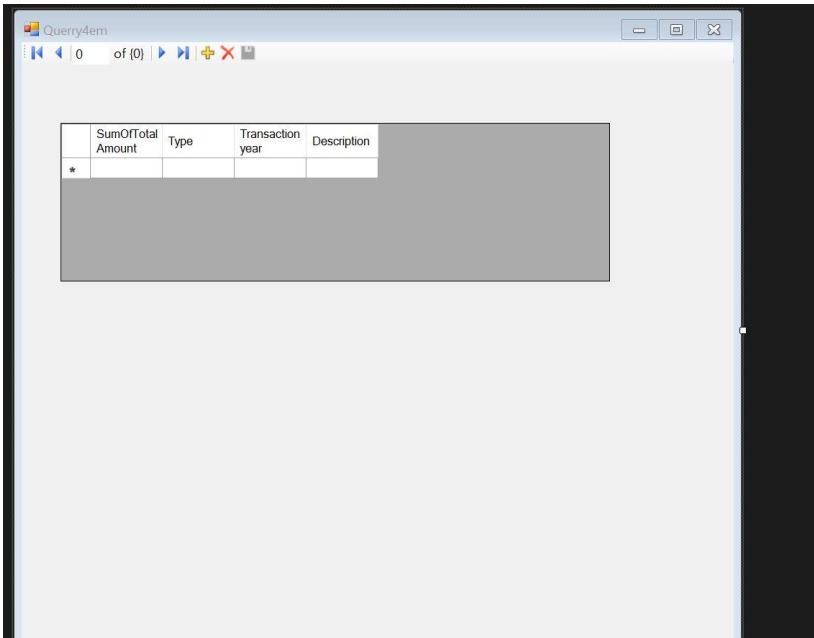
Query4em

1 of 4

	SumOfTotal Amount	Type	Transaction year	Description
▶	4800	Crop	2017	Cloudy
	3500	Crop	2018	Rainy
	12000	Livestock	2017	Cloudy
	4600	Livestock	2018	Rainy

5.

Design View:



Code View:

A screenshot of the Visual Studio IDE showing the "Code View". The current file is "Query5em.vb". The code defines a public class named "Query5em" with a single method: "Query5em_Load". The method handles the MyBase.Load event and uses a TODO comment to indicate it loads data from a database table named "Query5a1".

```
1  Public Class Query5em
2      : 0 references
3      |  Private Sub Query5em_Load(sender As Object, e As EventArgs) Handles MyBase.Load
4          'TODO: This line of code loads data into the 'Database111DataSet.Query5a1' table. You can move, or remove it, as needed.
5          Me.Query5a1TableAdapter.Fill(Me.Database111DataSet.Query5a1)
6      End Sub
7  End Class
```

Output:

	Total Amount Paid	TotalMoneyEamed	Trans Date
▶	500	4600	10/8/2
	640	1500	10/15,
<	650	2000	10/15/2010

Next

	SumOfTotal Amount Paid	SumOfTotalMoneyEamed	SumOfTrans Date
▶	3490	20100	10/8/2010
*			

Web-form Application: FARM MANAGEMENT

Main Form:

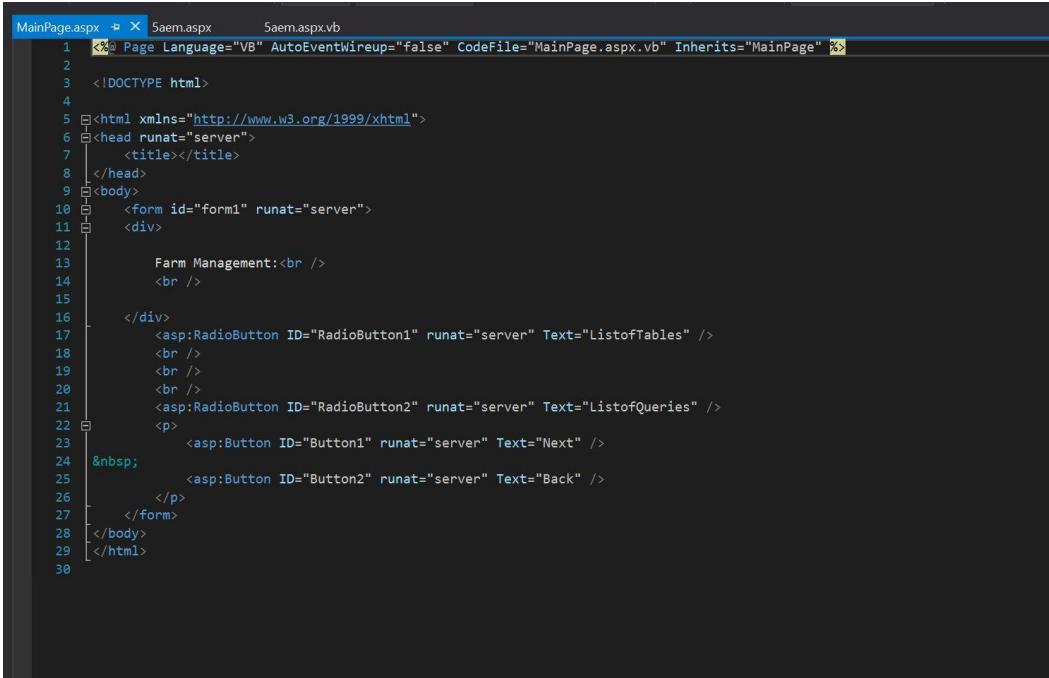


VB Code (Main Form):

```
6_MainPage.aspx
```

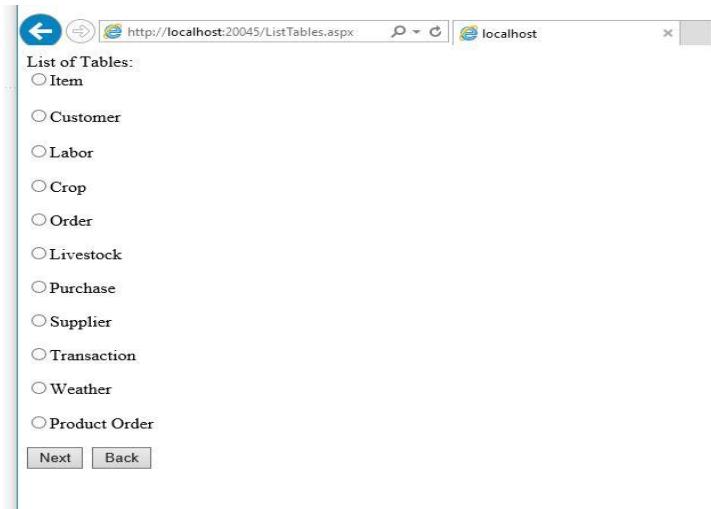
```
2  Partial Class MainPage
3      Inherits System.Web.UI.Page
4
5      References
6      Protected Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
7          If RadioButton1.Checked Then
8              Response.Redirect("ListTables.aspx")
9          ElseIf RadioButton2.Checked Then
10             Response.Redirect("ListQuerries.aspx")
11         End If
12     End Sub
13     References
14     Protected Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
15     End Sub
16 
```

Source code:

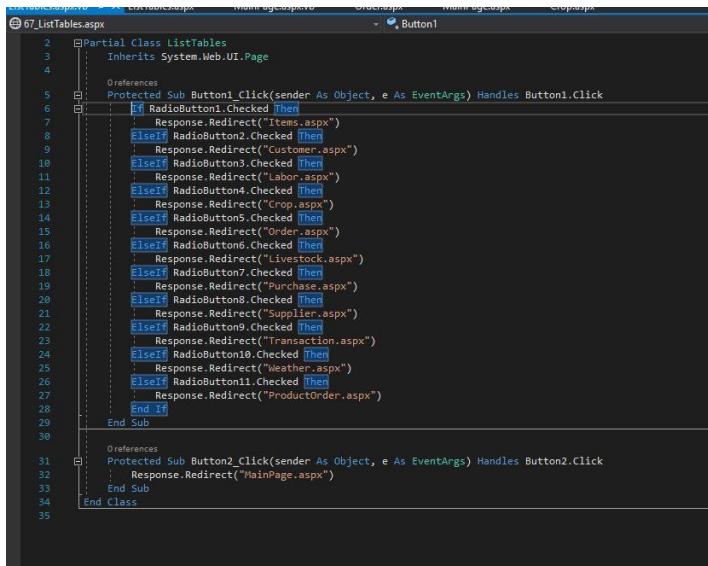


```
1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="MainPage.aspx.vb" Inherits="MainPage" %>
2
3 <!DOCTYPE html>
4
5 <html xmlns="http://www.w3.org/1999/xhtml">
6 <head runat="server">
7     <title></title>
8 </head>
9 <body>
10    <form id="form1" runat="server">
11        <div>
12            Farm Management:<br />
13            <br />
14
15            </div>
16            <asp:RadioButton ID="RadioButton1" runat="server" Text="ListofTables" />
17            <br />
18            <br />
19            <br />
20            <asp:RadioButton ID="RadioButton2" runat="server" Text="ListofQueries" />
21            <p>
22                <asp:Button ID="Button1" runat="server" Text="Next" />
23                &nbsp;
24                <asp:Button ID="Button2" runat="server" Text="Back" />
25            </p>
26        </form>
27    </body>
28 </html>
29
30
```

List of Tables:

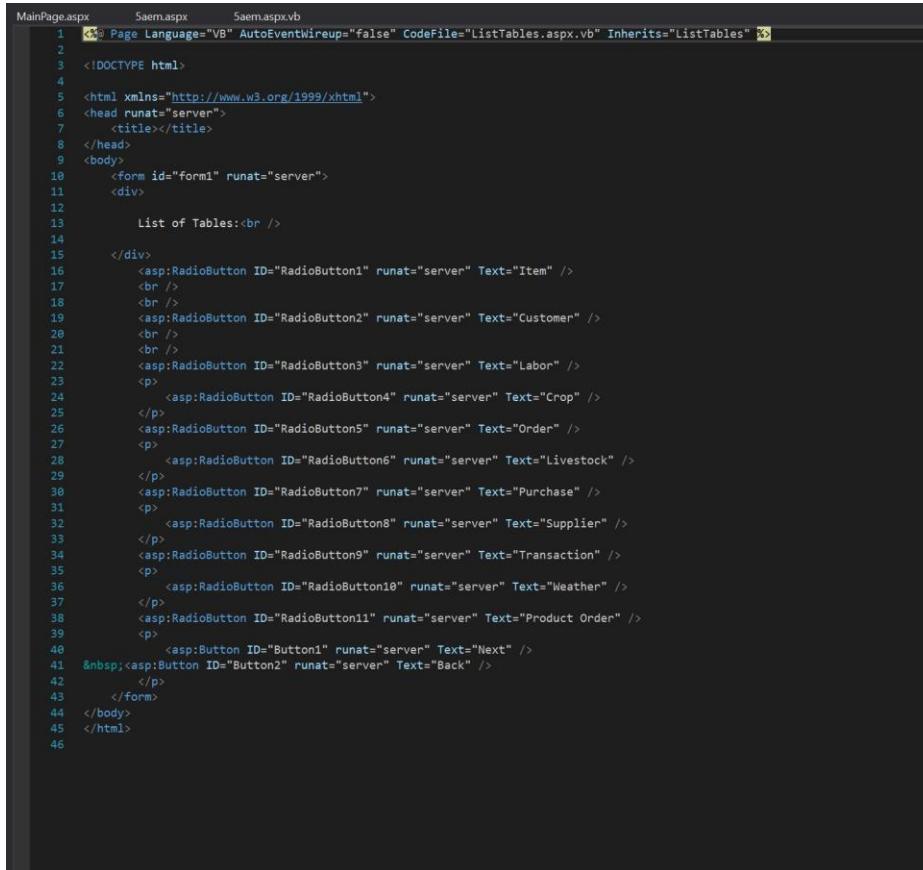


VB Code (List of Tables):



```
2  Partial Class ListTables
3      Inherits System.Web.UI.Page
4
5      References
6      Protected Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
7          If RadioButton1.Checked Then
8              Response.Redirect("Items.aspx")
9          ElseIf RadioButton2.Checked Then
10             Response.Redirect("Customer.aspx")
11         ElseIf RadioButton3.Checked Then
12             Response.Redirect("Labor.aspx")
13         ElseIf RadioButton4.Checked Then
14             Response.Redirect("Crop.aspx")
15         ElseIf RadioButton5.Checked Then
16             Response.Redirect("Order.aspx")
17         ElseIf RadioButton6.Checked Then
18             Response.Redirect("Livestock.aspx")
19         ElseIf RadioButton7.Checked Then
20             Response.Redirect("Purchase.aspx")
21         ElseIf RadioButton8.Checked Then
22             Response.Redirect("Supplier.aspx")
23         ElseIf RadioButton9.Checked Then
24             Response.Redirect("Transaction.aspx")
25         ElseIf RadioButton10.Checked Then
26             Response.Redirect("Weather.aspx")
27         ElseIf RadioButton11.Checked Then
28             Response.Redirect("ProductOrder.aspx")
29     End If
30
31     References
32     Protected Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
33         Response.Redirect("MainPage.aspx")
34     End Sub
35 End Class
```

Source view:



```
1  <%@ Page Language="VB" AutoEventWireup="false" CodeFile="listTables.aspx.vb" Inherits="ListTables" %>
2
3  <!DOCTYPE html>
4
5  <html xmlns="http://www.w3.org/1999/xhtml">
6  <head runat="server">
7      <title></title>
8  </head>
9  <body>
10     <form id="form1" runat="server">
11         <div>
12
13             List of Tables:<br />
14
15             <div>
16                 <asp:RadioButton ID="RadioButton1" runat="server" Text="Item" />
17                 <br />
18                 <asp:RadioButton ID="RadioButton2" runat="server" Text="Customer" />
19                 <br />
20                 <asp:RadioButton ID="RadioButton3" runat="server" Text="Labor" />
21                 <br />
22                 <asp:RadioButton ID="RadioButton4" runat="server" Text="Crop" />
23                 <br />
24                 <asp:RadioButton ID="RadioButton5" runat="server" Text="Order" />
25                 <br />
26                 <asp:RadioButton ID="RadioButton6" runat="server" Text="Livestock" />
27                 <br />
28                 <asp:RadioButton ID="RadioButton7" runat="server" Text="Purchase" />
29                 <br />
30                 <asp:RadioButton ID="RadioButton8" runat="server" Text="Supplier" />
31                 <br />
32                 <asp:RadioButton ID="RadioButton9" runat="server" Text="Transaction" />
33                 <br />
34                 <asp:RadioButton ID="RadioButton10" runat="server" Text="Weather" />
35                 <br />
36                 <asp:RadioButton ID="RadioButton11" runat="server" Text="Product Order" />
37             </div>
38             <p>
39                 <asp:Button ID="Button1" runat="server" Text="Next" />
40                 &nbsp;<asp:Button ID="Button2" runat="server" Text="Back" />
41             </p>
42         </div>
43     </form>
44 </body>
45 </html>
```

Item Table Design view:

The screenshot shows the design view of an ASP.NET page. At the top, there are tabs for 'Items.aspx', 'Customer.aspx', 'ProductOrder.aspx', 'MainPage.aspx', and 'Crop.aspx'. Below the tabs is a 'div' element containing a 'GridView' control. The 'GridView' has a header row with columns: 'ID', 'Name', 'Item Type', 'Breed', and 'Description'. Below the header are ten data rows, each with three links: 'Edit', 'Delete', and 'Select'. The 'ID' column contains values from 0 to 9. The 'Name', 'Item Type', 'Breed', and 'Description' columns all contain the value 'abc'. At the bottom of the grid, there are two buttons: '1' and '2'. Below the grid, the data source is identified as 'AccessDataSource1'.

Source View:

```

1<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Items.aspx.vb" Inherits="Items" %>
2<!DOCTYPE html>
3<html xmlns="http://www.w3.org/1999/xhtml">
4<head runat="server">
5    <title></title>
6</head>
7<body>
8    <form id="form1" runat="server">
9        <div>
10            </div>
11            <div>
12                <asp:GridView ID="GridView1" runat="server" AllowPaging="True" AllowSorting="True" AutoGenerateColumns="False" DataKeyNames="ID" DataSourceID="AccessDataSource1">
13                    <Columns>
14                        <asp:CommandField ShowDeleteButton="True" ShowEditButton="True" ShowSelectButton="True" />
15                        <asp:BoundField DataField="ID" HeaderText="ID" ReadOnly="True" SortExpression="ID" />
16                        <asp:BoundField DataField="Name_Item" HeaderText="Name_Item" SortExpression="Name_Item" />
17                        <asp:BoundField DataField="Type" HeaderText="Type" SortExpression="Type" />
18                        <asp:BoundField DataField="Breed" HeaderText="Breed" SortExpression="Breed" />
19                        <asp:BoundField DataField="Description" HeaderText="Description" SortExpression="Description" />
20                    </Columns>
21                </asp:GridView>
22                <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sghart\Downloads\Database11.accdb" DeleteCommand="DELETE FROM `Item` WHERE `ID`<asp:DeleteParameters>
23                    <asp:Parameter Name="ID" Type="Int32" />
24                </DeleteParameters>
25                <asp:InsertParameters>
26                    <asp:Parameter Name="ID" Type="Int32" />
27                </InsertParameters>
28                <asp:UpdateParameters>
29                    <asp:Parameter Name="Name_Item" Type="String" />
30                    <asp:Parameter Name="Type" Type="String" />
31                    <asp:Parameter Name="Breed" Type="String" />
32                    <asp:Parameter Name="Description" Type="String" />
33                </UpdateParameters>
34            </asp:AccessDataSource>
35        </form>
36    </body>
37    </html>
38
39
40
41
42
43
44
45
46

```

The screenshot shows a web browser window with the URL <http://localhost:20045/Items.aspx>. The page displays a table with the following data:

	ID	Name	Item	Type	Breed	Description
Edit	1	Item1	Crop	B1	D1	
Delete	2	Item2	Crop	B2	D2	
Edit	3	Item3	Crop	B2	D2	
Delete	4	Item4	Crop	B3	D3	
Edit	5	Item5	Crop	B4	D4	
Delete	6	Item6	Livestock	BL1	DL1	
Edit	7	Item7	Livestock	BL2	DL2	
Delete	8	Item8	Livestock	BL3	DL3	
Edit	9	Item9	Livestock	BL3	DL3	
Delete	10	Item10	Livestock	BL4	DL4	

Customer Table Design view:

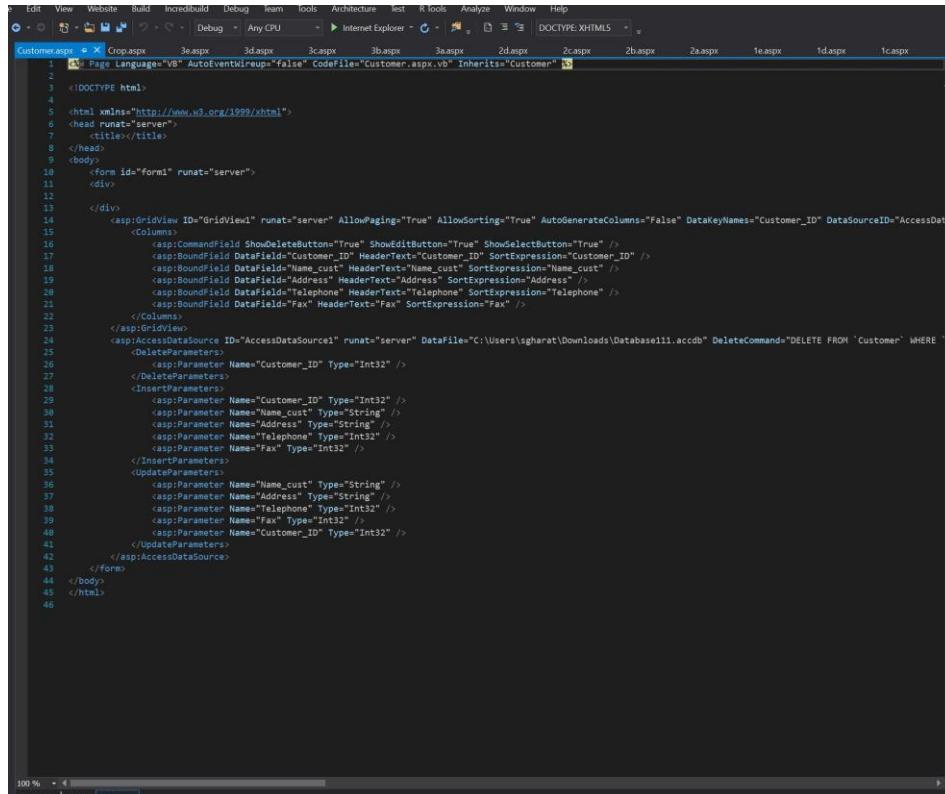
The screenshot shows the Visual Studio IDE in design mode for a file named "Customer.aspx". The page contains the following elements:

- A title bar with tabs for "Customer.aspx", "ProductOrder.aspx", "MainPage.aspx", and "Crop.aspx".
- A main content area containing a table with the following data:

	Customer ID	Name	cust Address	Telephone	Fax
Edit	0	abc	abc	0	0
Delete	1	abc	abc	1	1
Edit	2	abc	abc	2	2
Delete	3	abc	abc	3	3
Edit	4	abc	abc	4	4
Delete	5	abc	abc	5	5
Edit	6	abc	abc	6	6
Delete	7	abc	abc	7	7
Edit	8	abc	abc	8	8
Delete	9	abc	abc	9	9

Below the table, there is a link labeled "1 2" and an "AccessDataSource - AccessDataSource1" control.

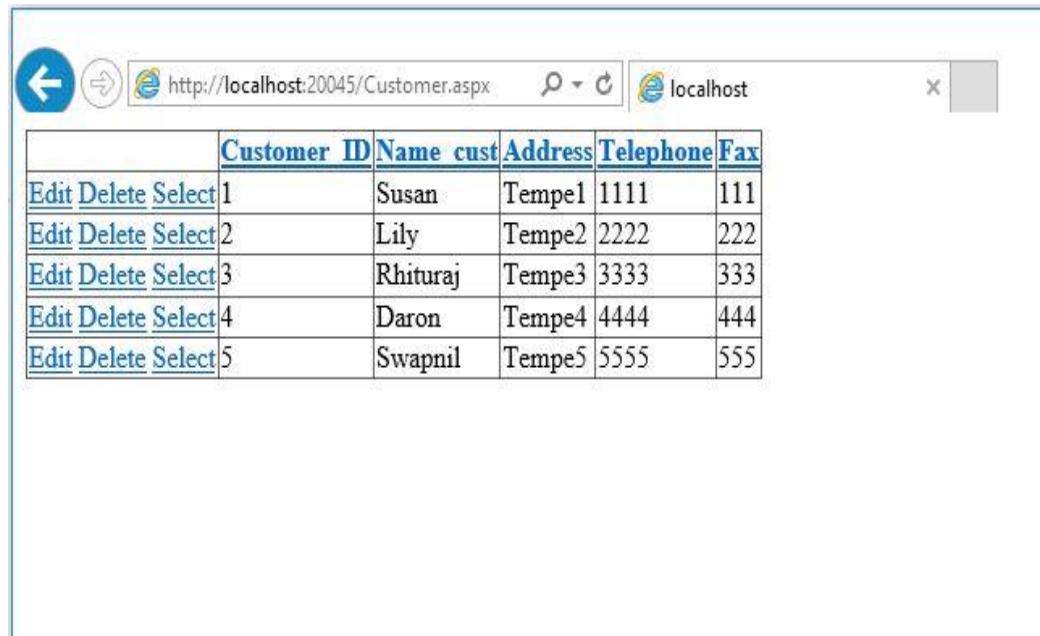
Source view:



The screenshot shows the Microsoft Visual Studio IDE with the code editor open for the file "Customer.aspx". The code is written in VB.NET and defines a form with a GridView control. The GridView has columns for Customer ID, Name cust, Address, Telephone, and Fax. It includes command fields for Edit, Delete, and Select. An AccessDataSource control named "AccessDataSource1" is used to bind the data. The code also includes parameter definitions for Delete, Insert, Update, and Select operations.

```
1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="Customer.aspx.vb" Inherits="Customer" %>
2 <!DOCTYPE HTML>
3 <html xmlns="http://www.w3.org/1999/xhtml">
4 <head runat="server">
5   <title></title>
6 </head>
7 <body>
8   <form id="form1" runat="server">
9     <div>
10    <asp:GridView ID="GridView1" runat="server" AllowPaging="True" AllowSorting="True" AutoGenerateColumns="False" DataKeyNames="Customer_ID" DataSourceID="AccessDataSource1">
11      <Columns>
12        <asp:CommandField ShowDeleteButton="True" ShowEditButton="True" ShowSelectButton="True" />
13        <asp:BoundField DataField="Customer_ID" HeaderText="Customer ID" SortExpression="Customer_ID" />
14        <asp:BoundField DataField="Name_cust" HeaderText="Name cust" SortExpression="Name_cust" />
15        <asp:BoundField DataField="Address" HeaderText="Address" SortExpression="Address" />
16        <asp:BoundField DataField="Telephone" HeaderText="Telephone" SortExpression="Telephone" />
17        <asp:BoundField DataField="Fax" HeaderText="Fax" SortExpression="Fax" />
18      </Columns>
19    </asp:GridView>
20    <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharat\Downloads\Database11.accdb" DeleteCommands="DELETE FROM 'Customer' WHERE Customer_ID = @Customer_ID" InsertCommands="INSERT INTO 'Customer' (Name_cust, Address, Telephone, Fax) VALUES (@Name_cust, @Address, @Telephone, @Fax)" UpdateCommands="UPDATE 'Customer' SET Name_cust = @Name_cust, Address = @Address, Telephone = @Telephone, Fax = @Fax WHERE Customer_ID = @Customer_ID" />
21    <DeleteParameters>
22      <asp:Parameter Name="Customer_ID" Type="Int32" />
23    </DeleteParameters>
24    <InsertParameters>
25      <asp:Parameter Name="Customer_ID" Type="Int32" />
26      <asp:Parameter Name="Name_cust" Type="String" />
27      <asp:Parameter Name="Address" Type="String" />
28      <asp:Parameter Name="Telephone" Type="Int32" />
29      <asp:Parameter Name="Fax" Type="Int32" />
30    </InsertParameters>
31    <UpdateParameters>
32      <asp:Parameter Name="Name_cust" Type="String" />
33      <asp:Parameter Name="Address" Type="String" />
34      <asp:Parameter Name="Telephone" Type="Int32" />
35      <asp:Parameter Name="Fax" Type="Int32" />
36    </UpdateParameters>
37  </asp:AccessDataSource>
38  </form>
39 </body>
40 </html>
```

Customer Table Output:



The screenshot shows a web browser window with the URL "http://localhost:20045/Customer.aspx". The page displays a table of customer information with the following data:

	<u>Customer ID</u>	<u>Name cust</u>	<u>Address</u>	<u>Telephone</u>	<u>Fax</u>
Edit	Delete	Select	1	Susan	Tempe1 1111
Edit	Delete	Select	2	Lily	Tempe2 2222
Edit	Delete	Select	3	Rhituraj	Tempe3 3333
Edit	Delete	Select	4	Daron	Tempe4 4444
Edit	Delete	Select	5	Swapnil	Tempe5 5555

Labor Table Input:

	<u>Edit</u> <u>Delete</u> <u>Select</u>	<u>L_Date</u>	<u>Job Description</u>	<u>Total Amount Paid</u>	<u>Amount of Money Paid per Hour</u>	<u>Amount person used</u>
<u>Edit</u> <u>Delete</u> <u>Select</u>	11/5/2018 12:00:00 AM	abc		0	0	0
<u>Edit</u> <u>Delete</u> <u>Select</u>	11/5/2018 12:00:00 AM	abc		0.1	0.1	1
<u>Edit</u> <u>Delete</u> <u>Select</u>	11/5/2018 12:00:00 AM	abc		0.2	0.2	2
<u>Edit</u> <u>Delete</u> <u>Select</u>	11/5/2018 12:00:00 AM	abc		0.3	0.3	3
<u>Edit</u> <u>Delete</u> <u>Select</u>	11/5/2018 12:00:00 AM	abc		0.4	0.4	4
<u>Edit</u> <u>Delete</u> <u>Select</u>	11/5/2018 12:00:00 AM	abc		0.5	0.5	5
<u>Edit</u> <u>Delete</u> <u>Select</u>	11/5/2018 12:00:00 AM	abc		0.6	0.6	6
<u>Edit</u> <u>Delete</u> <u>Select</u>	11/5/2018 12:00:00 AM	abc		0.7	0.7	7
<u>Edit</u> <u>Delete</u> <u>Select</u>	11/5/2018 12:00:00 AM	abc		0.8	0.8	8
<u>Edit</u> <u>Delete</u> <u>Select</u>	11/5/2018 12:00:00 AM	abc		0.9	0.9	9

1 [2](#)

AccessDataSource - AccessDataSource1

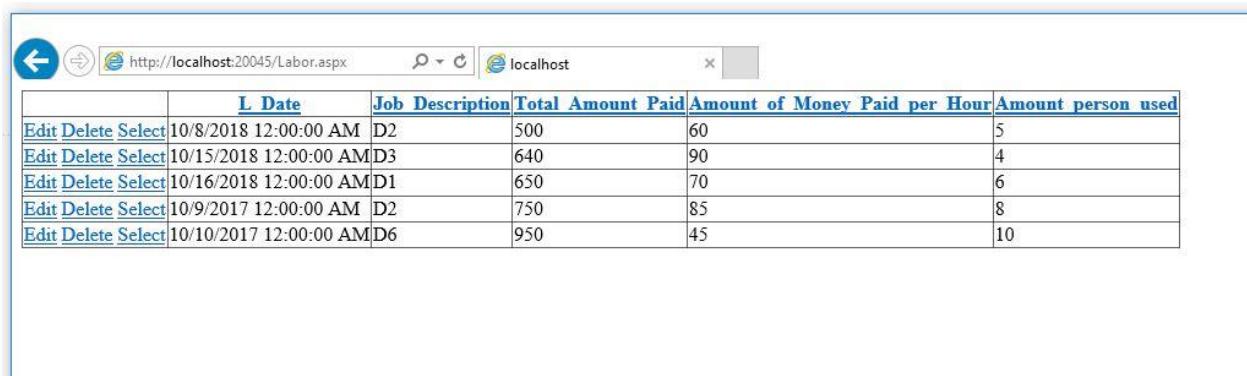
Source View:

```

1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="Labor.aspx.vb" Inherits="Labor" %>
2
3 <!DOCTYPE html>
4
5 <html xmlns="http://www.w3.org/1999/xhtml">
6 <head runat="server">
7   <title></title>
8 </head>
9 <body>
10  <form id="form1" runat="server">
11    <div>
12
13    </div>
14    <asp:GridView ID="GridView1" runat="server" AllowPaging="True" AllowSorting="True" AutoGenerateColumns="False" DataKeyNames="L_Date" DataSourceID="AccessDataSource1">
15      <Columns>
16        <asp:CommandField ShowDeleteButton="True" ShowEditButton="True" ShowSelectButton="True" />
17        <asp:BoundField DataField="L_Date" HeaderText="L_Date" ReadOnly="True" SortExpression="L_Date" />
18        <asp:BoundField DataField="Job_Description" HeaderText="Job_Description" SortExpression="Job_Description" />
19        <asp:BoundField DataField="Total_Amount_Paid" HeaderText="Total_Amount_Paid" SortExpression="Total_Amount_Paid" />
20        <asp:BoundField DataField="Amount_of_Money_Paid_per_Hour" HeaderText="Amount_of_Money_Paid_per_Hour" SortExpression="Amount_of_Money_Paid_per_Hour" />
21        <asp:BoundField DataField="Amount_person_used" HeaderText="Amount_person_used" SortExpression="Amount_person_used" />
22      </Columns>
23    </asp:GridView>
24    <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharat\Downloads\Database1.accdb" DeleteCommand="DELETE FROM `Labor` WHERE `L_Date` = @L_Date" InsertCommand="INSERT INTO `Labor`(`L_Date`, `Job_Description`, `Total_Amount_Paid`, `Amount_of_Money_Paid_per_Hour`, `Amount_person_used`) VALUES (@L_Date, @Job_Description, @Total_Amount_Paid, @Amount_of_Money_Paid_per_Hour, @Amount_person_used)" UpdateCommand="UPDATE `Labor` SET `Job_Description` = @Job_Description, `Total_Amount_Paid` = @Total_Amount_Paid, `Amount_of_Money_Paid_per_Hour` = @Amount_of_Money_Paid_per_Hour, `Amount_person_used` = @Amount_person_used WHERE `L_Date` = @L_Date" >
25      <DeleteParameters>
26        <asp:Parameter Name="L_Date" Type="DateTime" />
27      </DeleteParameters>
28      <InsertParameters>
29        <asp:Parameter Name="L_Date" Type="DateTime" />
30        <asp:Parameter Name="Job_Description" Type="String" />
31        <asp:Parameter Name="Total_Amount_Paid" Type="Decimal" />
32        <asp:Parameter Name="Amount_of_Money_Paid_per_Hour" Type="Decimal" />
33        <asp:Parameter Name="Amount_person_used" Type="Int32" />
34      </InsertParameters>
35      <UpdateParameters>
36        <asp:Parameter Name="Job_Description" Type="String" />
37        <asp:Parameter Name="Total_Amount_Paid" Type="Decimal" />
38        <asp:Parameter Name="Amount_of_Money_Paid_per_Hour" Type="Decimal" />
39        <asp:Parameter Name="Amount_person_used" Type="Int32" />
40        <asp:Parameter Name="L_Date" Type="DateTime" />
41      </UpdateParameters>
42    </asp:AccessDataSource>
43  </form>
44 </body>
45 </html>
46

```

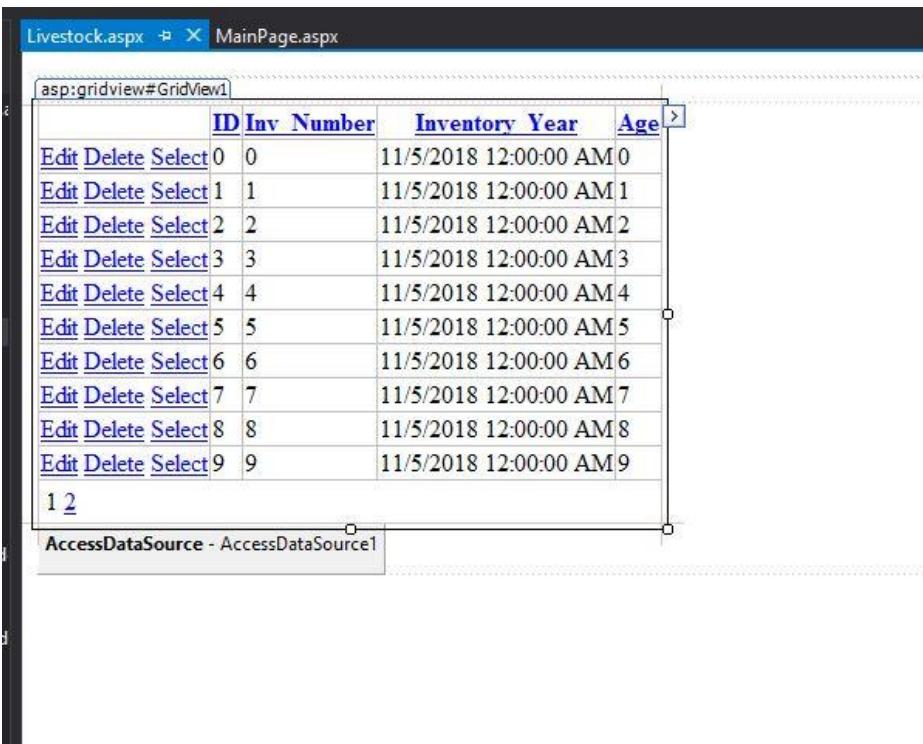
Labor Table Output:



A screenshot of a web browser window titled "localhost". The address bar shows "http://localhost:20045/Labor.aspx". The main content area displays a table with the following data:

	<u>L Date</u>	<u>Job Description</u>	<u>Total Amount Paid</u>	<u>Amount of Money Paid per Hour</u>	<u>Amount person used</u>
Edit	10/8/2018 12:00:00 AM	D2	500	60	5
Edit	10/15/2018 12:00:00 AM	D3	640	90	4
Edit	10/16/2018 12:00:00 AM	D1	650	70	6
Edit	10/9/2017 12:00:00 AM	D2	750	85	8
Edit	10/10/2017 12:00:00 AM	D6	950	45	10

Livestock Table Design View:



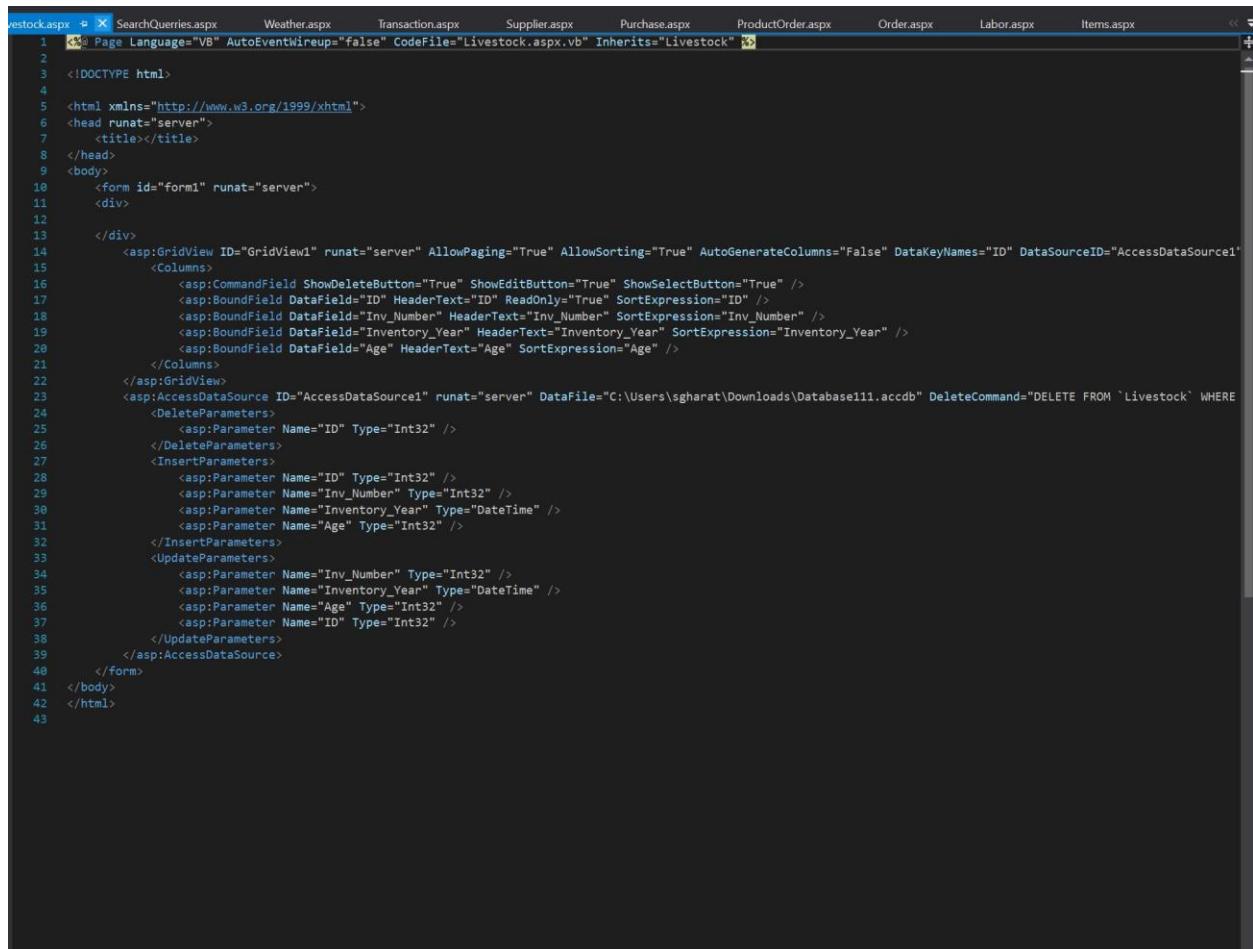
A screenshot of a web editor showing the design view of the Livestock table. The title bar says "Livestock.aspx" and "MainPage.aspx". The main content area contains a grid view with the following columns: ID, Inv Number, Inventory Year, and Age. The data rows are numbered 0 to 9. Below the grid view, there is a navigation bar with pages 1 and 2, and a footer section labeled "AccessDataSource - AccessDataSource1".

	<u>ID</u>	<u>Inv Number</u>	<u>Inventory Year</u>	<u>Age</u>
Edit	0	0	11/5/2018 12:00:00 AM	0
Edit	1	1	11/5/2018 12:00:00 AM	1
Edit	2	2	11/5/2018 12:00:00 AM	2
Edit	3	3	11/5/2018 12:00:00 AM	3
Edit	4	4	11/5/2018 12:00:00 AM	4
Edit	5	5	11/5/2018 12:00:00 AM	5
Edit	6	6	11/5/2018 12:00:00 AM	6
Edit	7	7	11/5/2018 12:00:00 AM	7
Edit	8	8	11/5/2018 12:00:00 AM	8
Edit	9	9	11/5/2018 12:00:00 AM	9

1 2

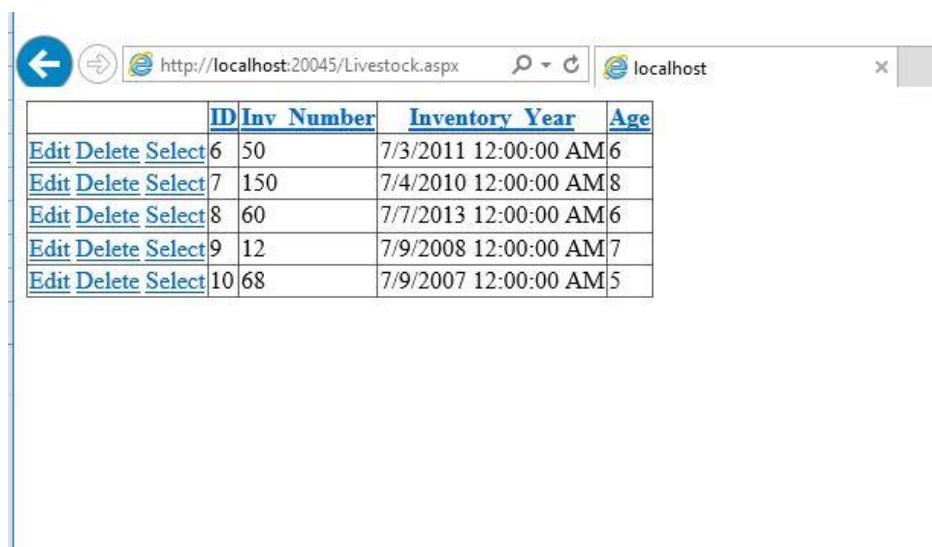
AccessDataSource - AccessDataSource1

Source View:



```
1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="Livestock.aspx.vb" Inherits="Livestock" %>
2
3 <!DOCTYPE html>
4
5 <html xmlns="http://www.w3.org/1999/xhtml">
6 <head runat="server">
7   <title></title>
8 </head>
9 <body>
10   <form id="form1" runat="server">
11     <div>
12       <div>
13         <asp:GridView ID="GridView1" runat="server" AllowPaging="True" AllowSorting="True" AutoGenerateColumns="False" DataKeyNames="ID" DataSourceID="AccessDataSource1">
14           <Columns>
15             <asp:CommandField ShowDeleteButton="True" ShowEditButton="True" ShowSelectButton="True" />
16             <asp:BoundField DataField="ID" HeaderText="ID" ReadOnly="True" SortExpression="ID" />
17             <asp:BoundField DataField="Inv_Number" HeaderText="Inv_Number" SortExpression="Inv_Number" />
18             <asp:BoundField DataField="Inventory_Year" HeaderText="Inventory_Year" SortExpression="Inventory_Year" />
19             <asp:BoundField DataField="Age" HeaderText="Age" SortExpression="Age" />
20           </Columns>
21         </asp:GridView>
22         <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharat\Downloads\Database11.accdb" DeleteCommand="DELETE FROM `Livestock` WHERE
23           <DeleteParameters>
24             <asp:Parameter Name="ID" Type="Int32" />
25           </DeleteParameters>
26           <InsertParameters>
27             <asp:Parameter Name="ID" Type="Int32" />
28             <asp:Parameter Name="Inv_Number" Type="Int32" />
29             <asp:Parameter Name="Inventory_Year" Type="DateTime" />
30             <asp:Parameter Name="Age" Type="Int32" />
31           </InsertParameters>
32           <UpdateParameters>
33             <asp:Parameter Name="Inv_Number" Type="Int32" />
34             <asp:Parameter Name="Inventory_Year" Type="DateTime" />
35             <asp:Parameter Name="Age" Type="Int32" />
36             <asp:Parameter Name="ID" Type="Int32" />
37           </UpdateParameters>
38         </asp:AccessDataSource>
39       </div>
40     </div>
41   </body>
42 </html>
```

Labor Table Output:



	ID	Inv Number	Inventory Year	Age
Edit	6	50	7/3/2011 12:00:00 AM	6
Delete	7	150	7/4/2010 12:00:00 AM	8
Select	8	60	7/7/2013 12:00:00 AM	6
Edit	9	12	7/9/2008 12:00:00 AM	7
Delete	10	68	7/9/2007 12:00:00 AM	5

Order Table Design View:

	Order ID	Supplier ID	Release Date	Amount Paid	Actual Delivery Date	Expected Date	Payment Date
Edit	Delete	Select	0	11/5/2018 12:00:00 AM 0	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM
Edit	Delete	Select	1	11/5/2018 12:00:00 AM 0.1	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM
Edit	Delete	Select	2	11/5/2018 12:00:00 AM 0.2	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM
Edit	Delete	Select	3	11/5/2018 12:00:00 AM 0.3	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM
Edit	Delete	Select	4	11/5/2018 12:00:00 AM 0.4	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM
Edit	Delete	Select	5	11/5/2018 12:00:00 AM 0.5	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM
Edit	Delete	Select	6	11/5/2018 12:00:00 AM 0.6	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM
Edit	Delete	Select	7	11/5/2018 12:00:00 AM 0.7	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM
Edit	Delete	Select	8	11/5/2018 12:00:00 AM 0.8	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM
Edit	Delete	Select	9	11/5/2018 12:00:00 AM 0.9	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM

1 2

AccessDataSource - AccessDataSource1

Source View:

```

Order.aspx 9 X Labor.aspx Items.aspx Customer.aspx Crop.aspx 3.aspx 3d.aspx 3c.aspx 3b.aspx 3a.aspx 2d.aspx 2c.aspx 2b.aspx
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:GridView ID="GridView1" runat="server" AllowPaging="True" AllowSorting="True" AutoGenerateColumns="False" DataKeyNames="Order_ID" DataSourceID="AccessDataSource1">
                <Columns>
                    <asp:CommandField ShowDeleteButton="True" ShowEditButton="True" ShowSelectButton="True" />
                    <asp:BoundField DataField="Order_ID" HeaderText="Order_ID" ReadOnly="True" SortExpression="Order_ID" />
                    <asp:BoundField DataField="Supplier_ID" HeaderText="Supplier_ID" SortExpression="Supplier_ID" />
                    <asp:BoundField DataField="Release_Date" HeaderText="Release_Date" SortExpression="Release_Date" />
                    <asp:BoundField DataField="Amount_Paid" HeaderText="Amount_Paid" SortExpression="Amount_Paid" />
                    <asp:BoundField DataField="Actual_Delivery_Date" HeaderText="Actual_Delivery_Date" SortExpression="Actual_Delivery_Date" />
                    <asp:BoundField DataField="Expected_Date" HeaderText="Expected_Date" SortExpression="Expected_Date" />
                    <asp:BoundField DataField="Payment_Date" HeaderText="Payment_Date" SortExpression="Payment_Date" />
                </Columns>
            </asp:GridView>
            <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharat\Downloads\Database111.accdb" DeleteCommand="DELETE FROM `Order` WHERE `Order_ID` = @Order_ID" InsertCommand="INSERT INTO `Order`(`Supplier_ID`, `Release_Date`, `Amount_Paid`, `Actual_Delivery_Date`, `Expected_Date`, `Payment_Date`) VALUES (@Supplier_ID, @Release_Date, @Amount_Paid, @Actual_Delivery_Date, @Expected_Date, @Payment_Date)" UpdateCommand="UPDATE `Order` SET `Supplier_ID` = @Supplier_ID, `Release_Date` = @Release_Date, `Amount_Paid` = @Amount_Paid, `Actual_Delivery_Date` = @Actual_Delivery_Date, `Expected_Date` = @Expected_Date, `Payment_Date` = @Payment_Date WHERE `Order_ID` = @Order_ID" DeleteParameters="<DeleteParameters><asp:Parameter Name="Order_ID" Type="Int32" /></DeleteParameters>" InsertParameters="<InsertParameters><asp:Parameter Name="Order_ID" Type="Int32" /><asp:Parameter Name="Supplier_ID" Type="Int32" /><asp:Parameter Name="Release_Date" Type="Datetime" /><asp:Parameter Name="Amount_Paid" Type="Decimal" /><asp:Parameter Name="Actual_Delivery_Date" Type="Datetime" /><asp:Parameter Name="Expected_Date" Type="Datetime" /><asp:Parameter Name="Payment_Date" Type="Datetime" /></InsertParameters>" UpdateParameters="<UpdateParameters><asp:Parameter Name="Supplier_ID" Type="Int32" /><asp:Parameter Name="Release_Date" Type="Datetime" /><asp:Parameter Name="Amount_Paid" Type="Decimal" /><asp:Parameter Name="Actual_Delivery_Date" Type="DateTime" /><asp:Parameter Name="Expected_Date" Type="Datetime" /><asp:Parameter Name="Payment_Date" Type="Datetime" /><asp:Parameter Name="Order_ID" Type="Int32" /></UpdateParameters>"></asp:AccessDataSource>
        </div>
    </form>
</body>
</html>

```

Order Table Output:

	Order ID	Supplier ID	Release Date	Amount Paid	Actual Delivery Date	Expected Date	Payment Date
Edit Delete Select	1		9/3/2018 12:00:00 AM	20	10/1/2018 12:00:00 AM	10/3/2018 12:00:00 AM	10/3/2018 12:00:00 AM
Edit Delete Select	1		9/16/2018 12:00:00 AM	30	10/2/2018 12:00:00 AM	10/4/2018 12:00:00 AM	10/3/2018 12:00:00 AM
Edit Delete Select	2		8/5/2018 12:00:00 AM	80	10/9/2018 12:00:00 AM	10/7/2018 12:00:00 AM	10/7/2018 12:00:00 AM
Edit Delete Select	3		7/2/2018 12:00:00 AM	70	10/19/2018 12:00:00 AM	10/15/2018 12:00:00 AM	10/14/2018 12:00:00 AM
Edit Delete Select	4		9/13/2018 12:00:00 AM	80	10/26/2018 12:00:00 AM	10/16/2018 12:00:00 AM	10/10/2018 12:00:00 AM
Edit Delete Select	5		9/25/2018 12:00:00 AM	50	10/8/2018 12:00:00 AM	10/13/2018 12:00:00 AM	10/13/2018 12:00:00 AM
Edit Delete Select	6		10/6/2018 12:00:00 AM	70	10/4/2018 12:00:00 AM	10/2/2018 12:00:00 AM	10/5/2018 12:00:00 AM
Edit Delete Select	7		9/4/2018 12:00:00 AM	60	10/20/2018 12:00:00 AM	10/10/2018 12:00:00 AM	10/6/2018 12:00:00 AM
Edit Delete Select	8		8/30/2018 12:00:00 AM	90	10/10/2018 12:00:00 AM	10/12/2018 12:00:00 AM	10/12/2018 12:00:00 AM
Edit Delete Select	8		10/13/2018 12:00:00 AM	10	10/11/2018 12:00:00 AM	10/11/2018 12:00:00 AM	10/5/2018 12:00:00 AM

Product Order Design View:

ProductOrder.aspx ➔ × MainPage.aspx

asp:gridview#GridView1

	Order ID	Name	Product	Quantity
Edit Delete Select	0	abc		0
Edit Delete Select	1	abc		1
Edit Delete Select	2	abc		2
Edit Delete Select	3	abc		3
Edit Delete Select	4	abc		4
Edit Delete Select	5	abc		5
Edit Delete Select	6	abc		6
Edit Delete Select	7	abc		7
Edit Delete Select	8	abc		8
Edit Delete Select	9	abc		9

1 2

AccessDataSource - AccessDataSource1

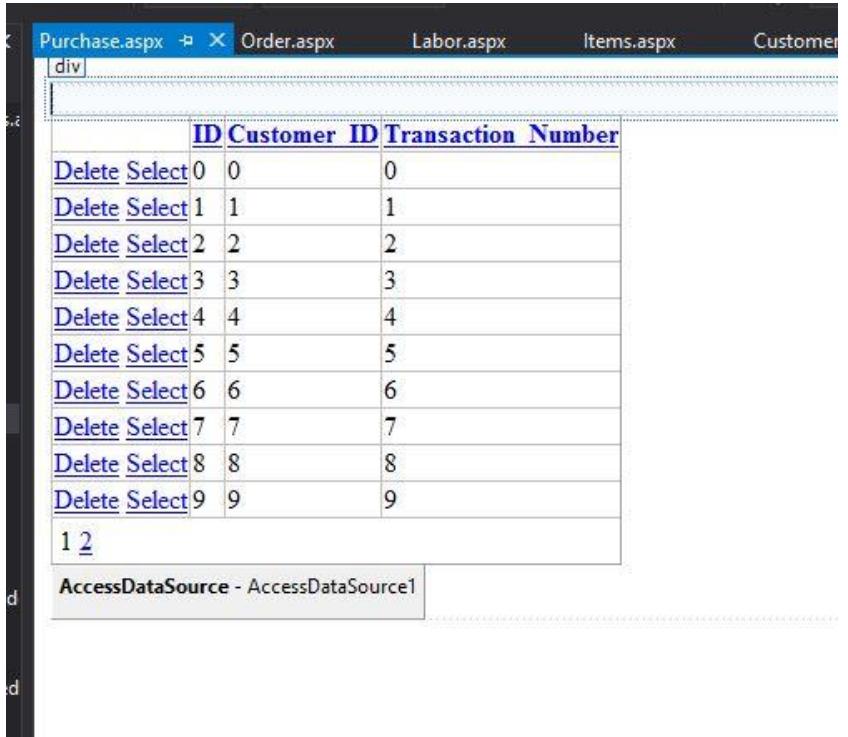
Source View:

```
ProductOrder.aspx # X Order.aspx Labor.aspx Items.aspx Customer.aspx Crop.aspx 3e.aspx 3d.aspx 3c.aspx 3b.aspx 3a.aspx 2d.aspx
1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="ProductOrder.aspx.vb" Inherits="ProductOrder" %>
2
3 <!DOCTYPE html>
4
5 <html xmlns="http://www.w3.org/1999/xhtml">
6 <head runat="server">
7   <title></title>
8 </head>
9 <body>
10   <form id="form1" runat="server">
11     <div>
12       </div>
13     </div>
14     <asp:GridView ID="GridView1" runat="server" AllowPaging="True" AllowSorting="True" AutoGenerateColumns="False" DataKeyNames="Order_ID,Name_Product" DataSourceID="AccessDataSource1">
15       <Columns>
16         <asp:CommandField ShowDeleteButton="True" ShowEditButton="True" ShowSelectButton="True" />
17         <asp:BoundField DataField="Order_ID" HeaderText="Order_ID" SortExpression="Order_ID" />
18         <asp:BoundField DataField="Name_Product" HeaderText="Name_Product" ReadOnly="True" SortExpression="Name_Product" />
19         <asp:BoundField DataField="Quantity" HeaderText="Quantity" SortExpression="Quantity" />
20       </Columns>
21     </asp:GridView>
22     <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharati\Downloads\Database11.accdb" DeleteCommand="DELETE FROM `Product Order` WHERE Order_ID = @Order_ID" InsertCommand="INSERT INTO `Product Order` (Order_ID, Name_Product, Quantity) VALUES (@Order_ID, @Name_Product, @Quantity)" UpdateCommand="UPDATE `Product Order` SET Name_Product = @Name_Product, Quantity = @Quantity WHERE Order_ID = @Order_ID" >
23       <DeleteParameters>
24         <asp:Parameter Name="Order_ID" Type="Int32" />
25         <asp:Parameter Name="Name_Product" Type="String" />
26       </DeleteParameters>
27       <InsertParameters>
28         <asp:Parameter Name="Order_ID" Type="Int32" />
29         <asp:Parameter Name="Name_Product" Type="String" />
30         <asp:Parameter Name="Quantity" Type="Int32" />
31       </InsertParameters>
32       <UpdateParameters>
33         <asp:Parameter Name="Quantity" Type="Int32" />
34         <asp:Parameter Name="Order_ID" Type="Int32" />
35         <asp:Parameter Name="Name_Product" Type="String" />
36       </UpdateParameters>
37     </asp:AccessDataSource>
38   </form>
39 </body>
40 </html>
```

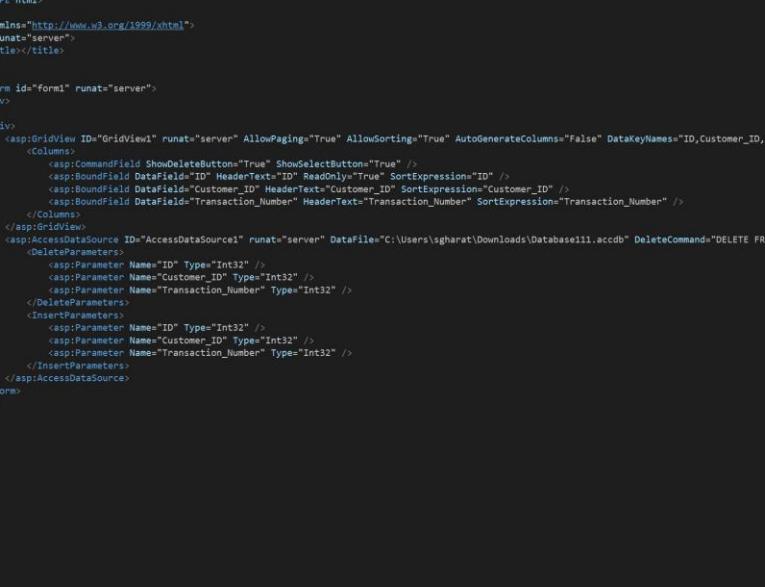
Product Order Output:

	Order ID	Name Product	Quantity
Edit	1	Prod1	5
Edit	1	Prod2	6
Edit	2	Prod2	3
Edit	3	Prod3	4
Edit	4	Prod4	3
Edit	5	Prod1	5
Edit	6	Prod2	3

Purchase Design View:



Source View:

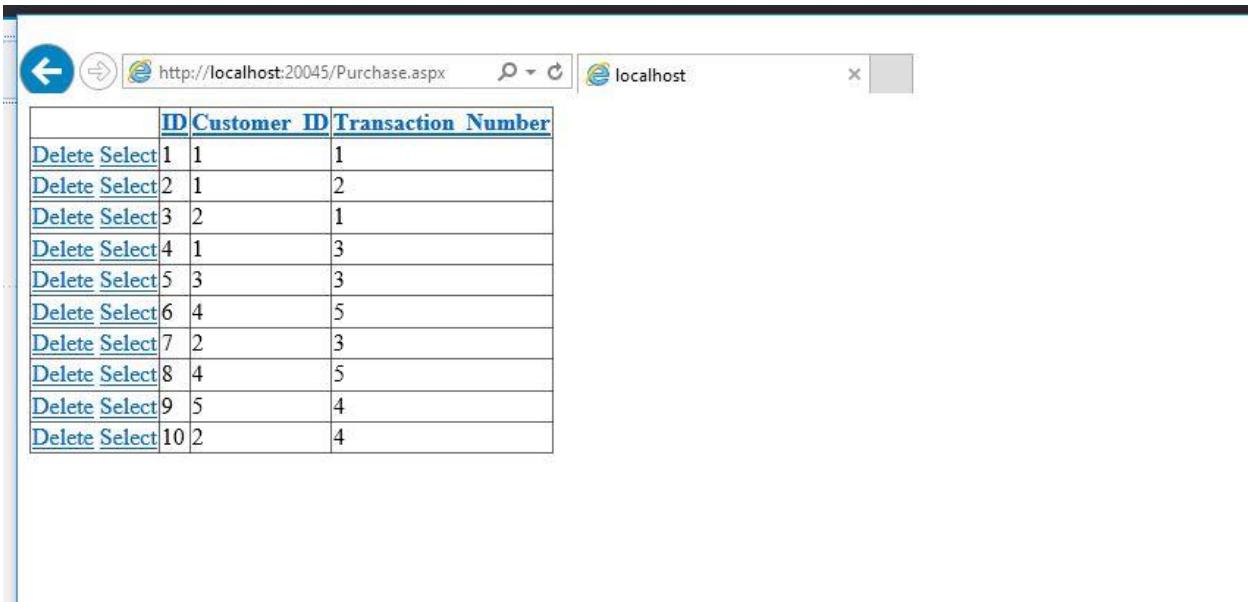


The screenshot shows the Microsoft Visual Studio IDE interface with the following details:

- Title Bar:** Displays "Purchase.aspx" as the active file.
- Toolbars:** Standard Visual Studio toolbars for navigation and code editing.
- Status Bar:** Shows "DOCTYPE: XHTML1" and "Any CPU".
- Code Editor:** The main area contains the C# code for the Purchase.aspx page. The code includes:
 - Page directive: `<% Page Language="VB" AutoEventWireup="false" CodeFile="Purchase.aspx.vb" Inherits="Purchase" %>`
 - HTML structure: ``
 - Head section: ``
 - Body section: ``
 - Form element: ``
 - Div element: `

`
 - GridView control: ``
 - Columns section: ``
 - CommandField: ` - BoundField for Customer_ID: ` - BoundField for Transaction_Number: `
 - AccessDataSource control: `

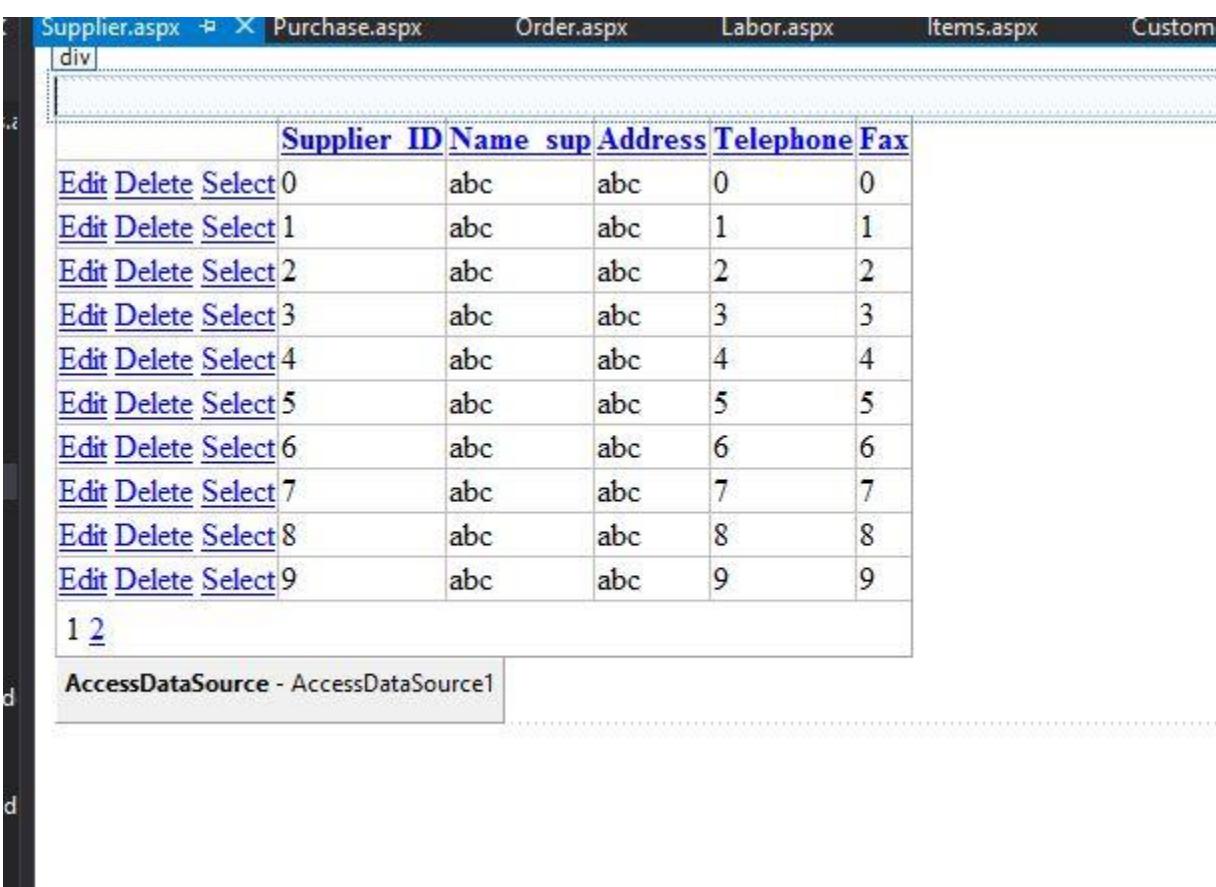
Purchase Output view:



A screenshot of a web browser window titled "localhost" showing a table of purchase data. The table has columns: ID, Customer ID, and Transaction Number. The data consists of 10 rows, each with a "Delete Select" link in the first column.

	ID	Customer ID	Transaction Number
Delete Select	1	1	1
Delete Select	2	1	2
Delete Select	3	2	1
Delete Select	4	1	3
Delete Select	5	3	3
Delete Select	6	4	5
Delete Select	7	2	3
Delete Select	8	4	5
Delete Select	9	5	4
Delete Select	10	2	4

Supplier Design View:



A screenshot of the Visual Studio Designer showing the "Supplier.aspx" page. The page contains a grid displaying supplier data and an "AccessDataSource1" control below it.

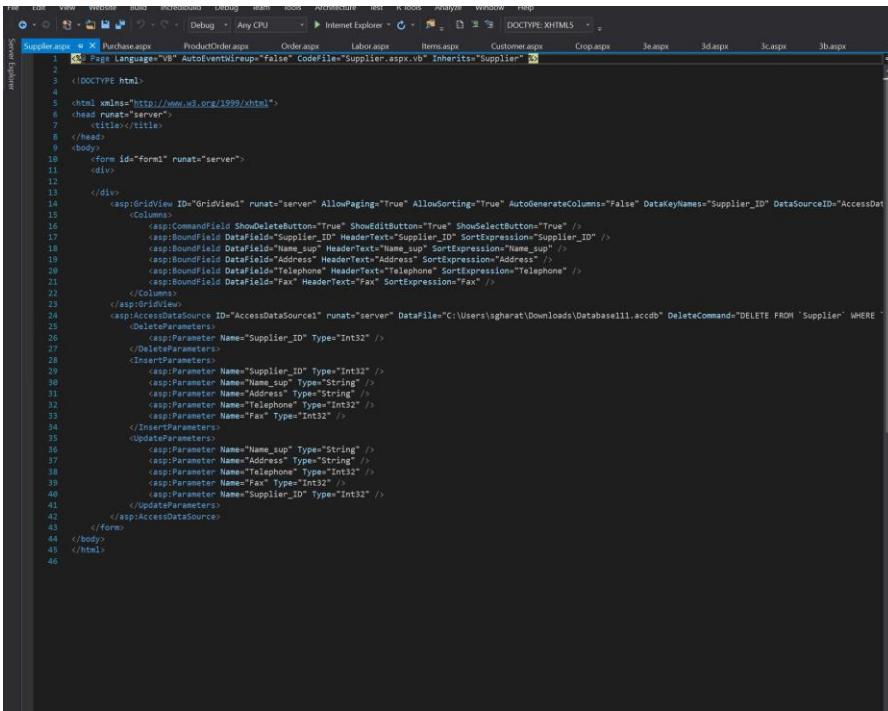
The grid has columns: Supplier ID, Name sup, Address, Telephone, and Fax. The data consists of 10 rows, each with "Edit", "Delete", and "Select" links in the first column.

	Supplier ID	Name sup	Address	Telephone	Fax
Edit Delete Select	0	abc	abc	0	0
Edit Delete Select	1	abc	abc	1	1
Edit Delete Select	2	abc	abc	2	2
Edit Delete Select	3	abc	abc	3	3
Edit Delete Select	4	abc	abc	4	4
Edit Delete Select	5	abc	abc	5	5
Edit Delete Select	6	abc	abc	6	6
Edit Delete Select	7	abc	abc	7	7
Edit Delete Select	8	abc	abc	8	8
Edit Delete Select	9	abc	abc	9	9

1 2

AccessDataSource - AccessDataSource1

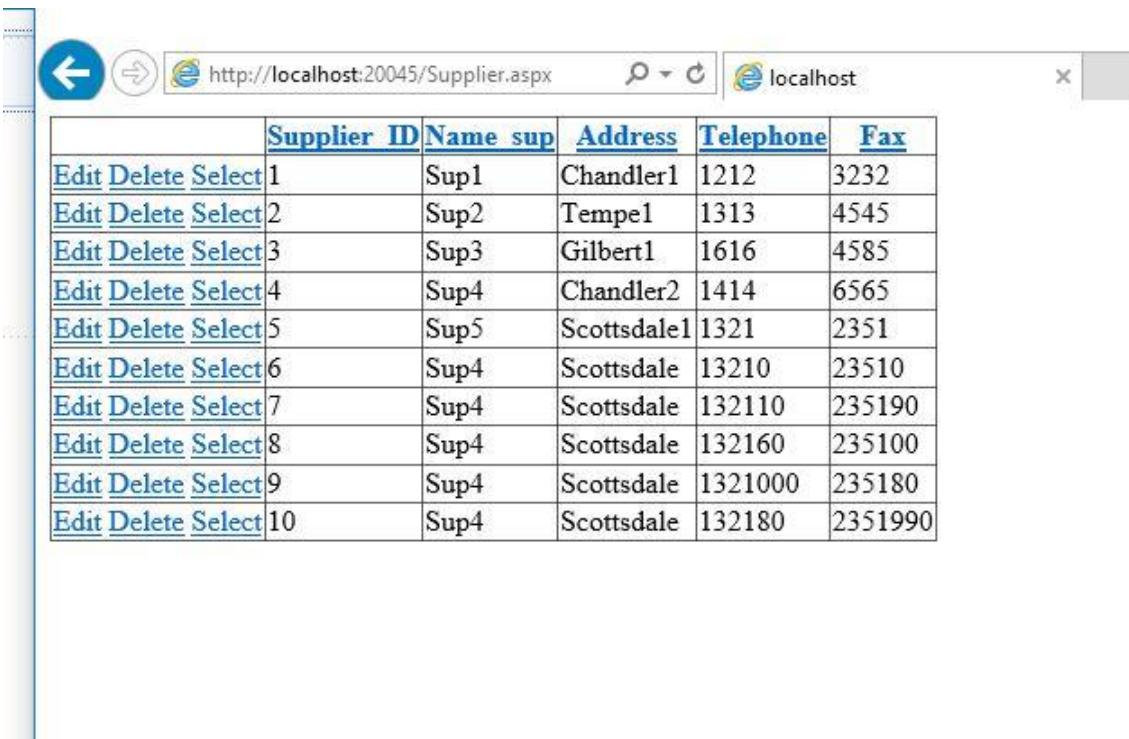
Supplier Source View:



```

1 <%@ Page Language="VB" AutoEventWireup="False" CodeFile="Supplier.aspx.vb" Inherits="Supplier" %>
2 
3 <!DOCTYPE html>
4 
5 <html xmlns="http://www.w3.org/1999/xhtml">
6 <head runat="server">
7   <title></title>
8 </head>
9 <body>
10   <form id="form1" runat="server">
11     <div>
12       </div>
13       <asp:GridView ID="GridView1" runat="server" AllowPaging="True" AllowSorting="True" AutoGenerateColumns="False" DataKeyNames="Supplier_ID" DataSourceID="AccessDataSource1">
14         <Columns>
15           <asp:CommandField ShowDeleteButton="True" ShowSelectButton="True" />
16           <asp:BoundField DataField="Supplier_ID" HeaderText="Supplier_ID" SortExpression="Supplier_ID" />
17           <asp:BoundField DataField="Name_sup" HeaderText="Name_sup" SortExpression="Name_sup" />
18           <asp:BoundField DataField="Address" HeaderText="Address" SortExpression="Address" />
19           <asp:BoundField DataField="Telephone" HeaderText="Telephone" SortExpression="Telephone" />
20           <asp:BoundField DataField="Fax" HeaderText="Fax" SortExpression="Fax" />
21         </Columns>
22       </asp:GridView>
23       <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\ihsan\Downloads\Database1.accdb" DeleteCommand="DELETE FROM [Supplier] WHERE [Supplier_ID] = @Supplier_ID" InsertCommand="INSERT INTO [Supplier] ([Supplier_ID], [Name_sup], [Address], [Telephone], [Fax]) VALUES (@Supplier_ID, @Name_sup, @Address, @Telephone, @Fax)" UpdateCommand="UPDATE [Supplier] SET [Name_sup] = @Name_sup, [Address] = @Address, [Telephone] = @Telephone, [Fax] = @Fax WHERE [Supplier_ID] = @Supplier_ID" />
24       <DeleteParameters>
25         <asp:Parameter Name="Supplier_ID" Type="Int32" />
26       </DeleteParameters>
27       <InsertParameters>
28         <asp:Parameter Name="Supplier_ID" Type="Int32" />
29         <asp:Parameter Name="Name_sup" Type="String" />
30         <asp:Parameter Name="Address" Type="String" />
31         <asp:Parameter Name="Telephone" Type="Int32" />
32         <asp:Parameter Name="Fax" Type="Int32" />
33       </InsertParameters>
34       <UpdateParameters>
35         <asp:Parameter Name="Supplier_ID" Type="Int32" />
36         <asp:Parameter Name="Name_sup" Type="String" />
37         <asp:Parameter Name="Address" Type="String" />
38         <asp:Parameter Name="Telephone" Type="Int32" />
39         <asp:Parameter Name="Fax" Type="Int32" />
40         <asp:Parameter Name="Supplier_ID" Type="Int32" />
41       </UpdateParameters>
42     </asp:AccessDataSource>
43   </form>
44 </body>
45 </html>
46 
```

Supplier Output:



	<u>Supplier ID</u>	<u>Name sup</u>	<u>Address</u>	<u>Telephone</u>	<u>Fax</u>
Edit	Delete	Select	1	Sup1	Chandler1
Edit	Delete	Select	2	Sup2	Tempe1
Edit	Delete	Select	3	Sup3	Gilbert1
Edit	Delete	Select	4	Sup4	Chandler2
Edit	Delete	Select	5	Sup5	Scottsdale1
Edit	Delete	Select	6	Sup4	Scottsdale
Edit	Delete	Select	7	Sup4	Scottsdale
Edit	Delete	Select	8	Sup4	Scottsdale
Edit	Delete	Select	9	Sup4	Scottsdale
Edit	Delete	Select	10	Sup4	Scottsdale

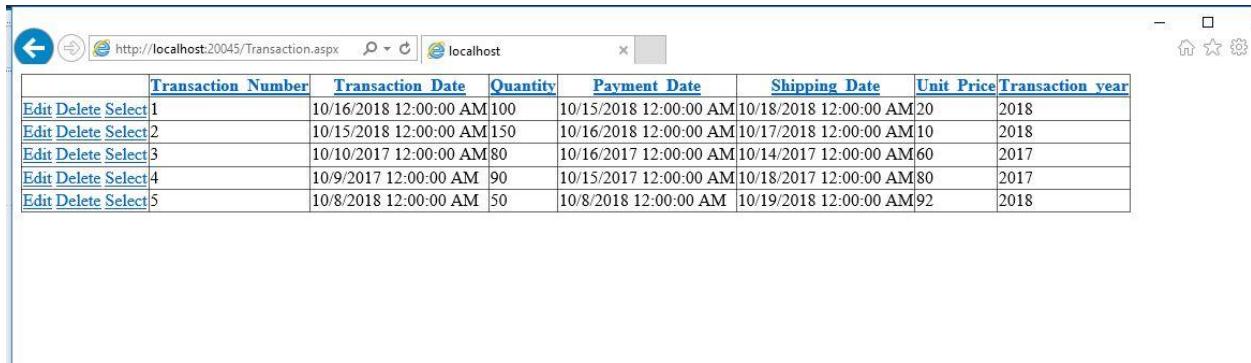
Transaction Design View:

Transaction Number	Transaction Date	Quantity	Payment Date	Shipping Date	Unit Price	Transaction year
Edit Delete Select 0	11/5/2018 12:00:00 AM	0	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	0	0
Edit Delete Select 1	11/5/2018 12:00:00 AM	1	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	0.1	1
Edit Delete Select 2	11/5/2018 12:00:00 AM	2	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	0.2	2
Edit Delete Select 3	11/5/2018 12:00:00 AM	3	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	0.3	3
Edit Delete Select 4	11/5/2018 12:00:00 AM	4	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	0.4	4
Edit Delete Select 5	11/5/2018 12:00:00 AM	5	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	0.5	5
Edit Delete Select 6	11/5/2018 12:00:00 AM	6	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	0.6	6
Edit Delete Select 7	11/5/2018 12:00:00 AM	7	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	0.7	7
Edit Delete Select 8	11/5/2018 12:00:00 AM	8	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	0.8	8
Edit Delete Select 9	11/5/2018 12:00:00 AM	9	11/5/2018 12:00:00 AM	11/5/2018 12:00:00 AM	0.9	9

Source View:

```
1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="Transaction.aspx.vb" Inherits="Transaction" %>
2 
3 <!DOCTYPE html>
4 
5 <html xmlns="http://www.w3.org/1999/xhtml">
6 <head runat="server">
7     <title></title>
8 </head>
9 <body>
10    <form id="form1" runat="server">
11        <div>
12            </div>
13        </div>
14        <asp:GridView ID="GridView1" runat="server" AllowPaging="True" AllowSorting="True" AutoGenerateColumns="False" DataKeyNames="Transaction_Number" DataSourceID="AccessDataSource1">
15            <Columns>
16                <asp:Commandfield ShowDeleteButton="True" ShowEditButton="True" ShowSelectButton="True" />
17                <asp:Boundfield DataField="Transaction_Number" HeaderText="Transaction_Number" SortExpression="Transaction_Number" />
18                <asp:Boundfield DataField="Transaction_Date" HeaderText="Transaction_Date" SortExpression="Transaction_Date" />
19                <asp:Boundfield DataField="Quantity" HeaderText="Quantity" SortExpression="Quantity" />
20                <asp:Boundfield DataField="Payment_Date" HeaderText="Payment_Date" SortExpression="Payment_Date" />
21                <asp:Boundfield DataField="Shipping_Date" HeaderText="Shipping_Date" SortExpression="Shipping_Date" />
22                <asp:Boundfield DataField="Unit_Price" HeaderText="Unit_Price" SortExpression="Unit_Price" />
23                <asp:Boundfield DataField="Transaction_year" HeaderText="Transaction_year" SortExpression="Transaction_year" />
24            </Columns>
25        </asp:GridView>
26        <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharati\Downloads\Database11.accdb" DeleteCommand="DELETE FROM `Transaction` WHERE Transaction_Number = @Transaction_Number" InsertCommand="INSERT INTO `Transaction` (Transaction_Number, Transaction_Date, Quantity, Payment_Date, Shipping_Date, Unit_Price, Transaction_year) VALUES (@Transaction_Number, @Transaction_Date, @Quantity, @Payment_Date, @Shipping_Date, @Unit_Price, @Transaction_year)" UpdateCommand="UPDATE `Transaction` SET Transaction_Number = @Transaction_Number, Transaction_Date = @Transaction_Date, Quantity = @Quantity, Payment_Date = @Payment_Date, Shipping_Date = @Shipping_Date, Unit_Price = @Unit_Price, Transaction_year = @Transaction_year WHERE Transaction_Number = @Original_Transaction_Number" DeleteParameters="<asp:Parameter Name="Transaction_Number" Type="Int32" />" InsertParameters="<asp:Parameter Name="Transaction_Number" Type="Int32" /> <asp:Parameter Name="Transaction_Date" Type="DateTime" /> <asp:Parameter Name="Quantity" Type="Int32" /> <asp:Parameter Name="Payment_Date" Type="DateTime" /> <asp:Parameter Name="Shipping_Date" Type="DateTime" /> <asp:Parameter Name="Unit_Price" Type="Decimal" /> <asp:Parameter Name="Transaction_year" Type="Int32" />" UpdateParameters="<asp:Parameter Name="Transaction_Number" Type="Int32" /> <asp:Parameter Name="Transaction_Date" Type="DateTime" /> <asp:Parameter Name="Quantity" Type="Int32" /> <asp:Parameter Name="Payment_Date" Type="DateTime" /> <asp:Parameter Name="Shipping_Date" Type="DateTime" /> <asp:Parameter Name="Unit_Price" Type="Decimal" /> <asp:Parameter Name="Transaction_year" Type="Int32" /> <asp:Parameter Name="Original_Transaction_Number" Type="Int32" />"/>
27        </DeleteParameters>
28        </DeleteParameters>
29        </InsertParameters>
30        </InsertParameters>
31        </UpdateParameters>
32    </asp:AccessDataSource>
33 </form>
34 </body>
35 </html>
```

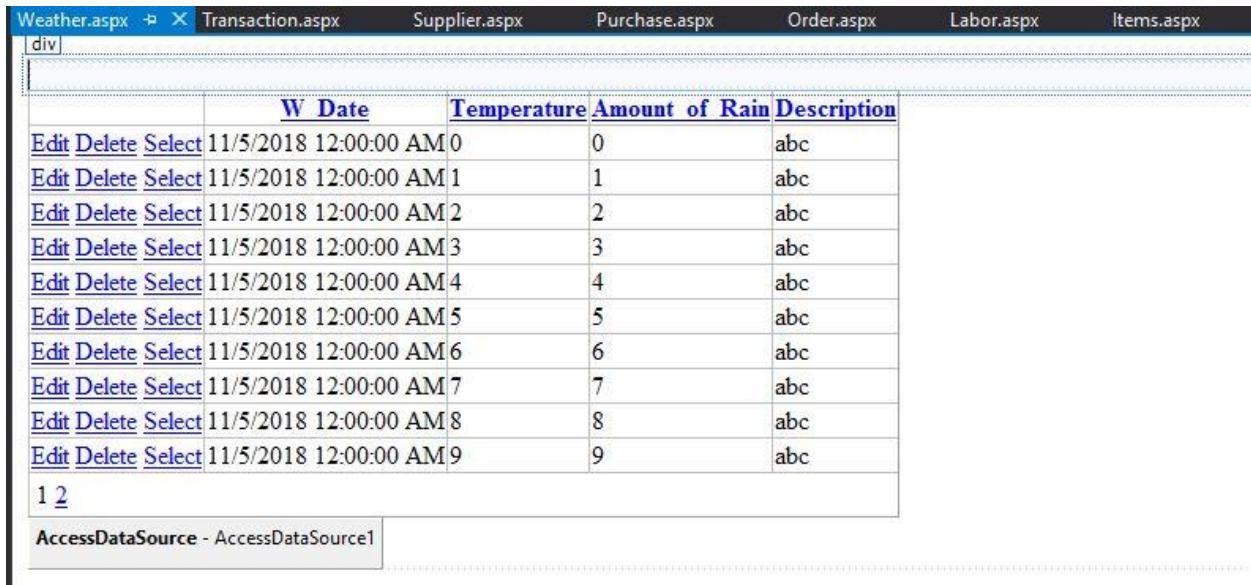
Transaction Output:



A screenshot of a web browser window titled "localhost". The address bar shows "http://localhost:20045/Transaction.aspx". The page displays a table with the following data:

Transaction Number	Transaction Date	Quantity	Payment Date	Shipping Date	Unit Price	Transaction year
Edit Delete Select 1	10/16/2018 12:00:00 AM	100	10/15/2018 12:00:00 AM	10/18/2018 12:00:00 AM	20	2018
Edit Delete Select 2	10/15/2018 12:00:00 AM	150	10/16/2018 12:00:00 AM	10/17/2018 12:00:00 AM	10	2018
Edit Delete Select 3	10/10/2017 12:00:00 AM	80	10/16/2017 12:00:00 AM	10/14/2017 12:00:00 AM	60	2017
Edit Delete Select 4	10/9/2017 12:00:00 AM	90	10/15/2017 12:00:00 AM	10/18/2017 12:00:00 AM	80	2017
Edit Delete Select 5	10/8/2018 12:00:00 AM	50	10/8/2018 12:00:00 AM	10/19/2018 12:00:00 AM	92	2018

Weather Design View:

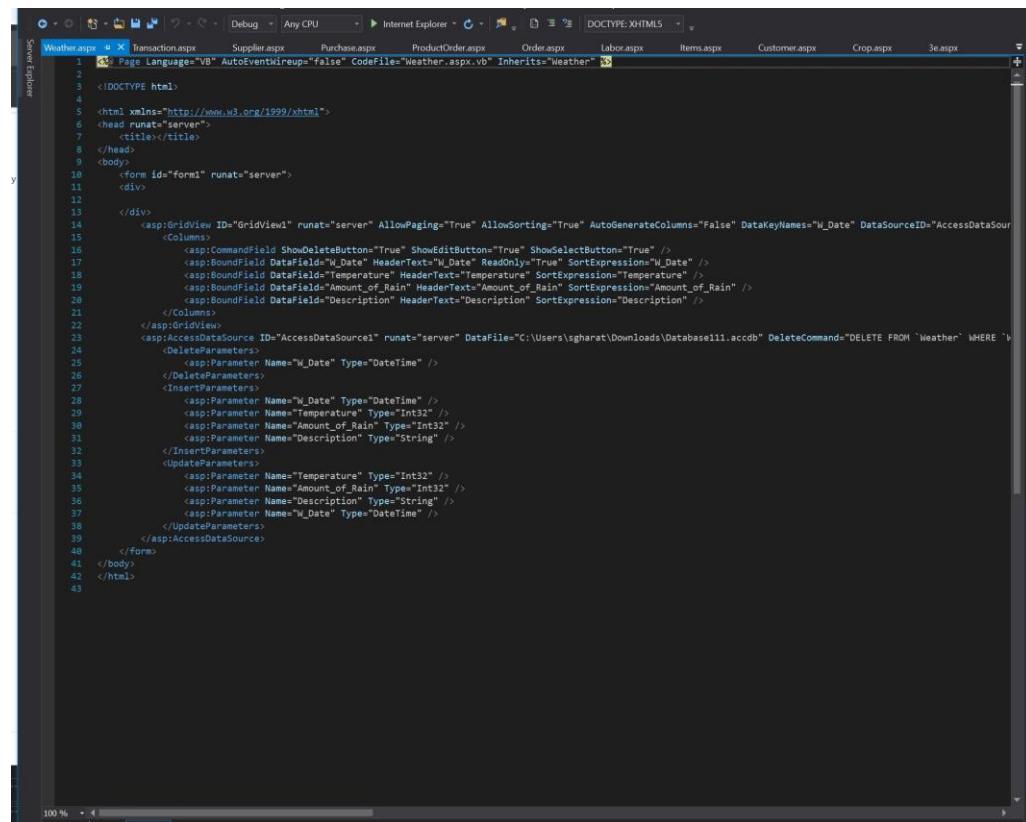


A screenshot of a web editor showing the "Weather.aspx" page. The top navigation bar includes links for "Weather.aspx", "Transaction.aspx", "Supplier.aspx", "Purchase.aspx", "Order.aspx", "Labor.aspx", and "Items.aspx". The main content area contains a table with the following data:

	W Date	Temperature	Amount of Rain	Description
Edit Delete Select	11/5/2018 12:00:00 AM	0	0	abc
Edit Delete Select	11/5/2018 12:00:00 AM	1	1	abc
Edit Delete Select	11/5/2018 12:00:00 AM	2	2	abc
Edit Delete Select	11/5/2018 12:00:00 AM	3	3	abc
Edit Delete Select	11/5/2018 12:00:00 AM	4	4	abc
Edit Delete Select	11/5/2018 12:00:00 AM	5	5	abc
Edit Delete Select	11/5/2018 12:00:00 AM	6	6	abc
Edit Delete Select	11/5/2018 12:00:00 AM	7	7	abc
Edit Delete Select	11/5/2018 12:00:00 AM	8	8	abc
Edit Delete Select	11/5/2018 12:00:00 AM	9	9	abc

Below the table, there are navigation links "1 2" and a label "AccessDataSource - AccessDataSource1".

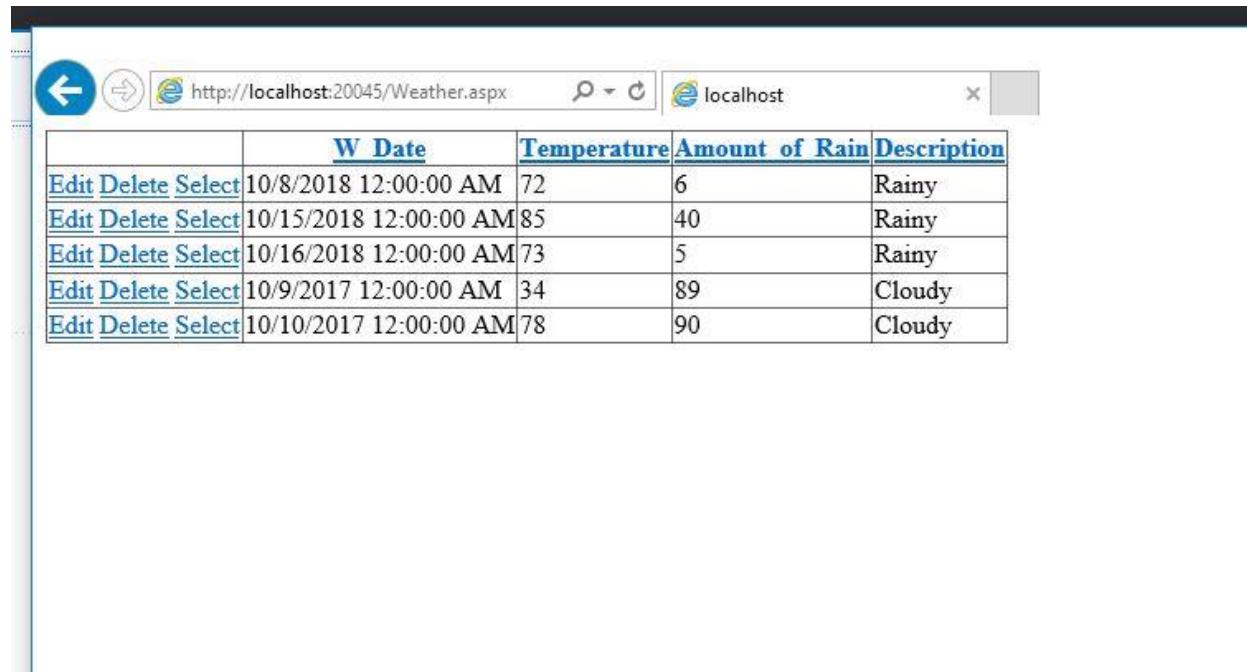
Weather Source View:



The screenshot shows the Visual Studio IDE with the Weather.aspx file open. The code editor displays the ASPX page source. The page includes a form with a GridView control. The GridView has columns for W Date, Temperature, Amount of Rain, and Description. It also includes command buttons for Edit, Delete, and Select. The code uses VB.NET syntax and includes parameters for the AccessDataSource1.

```
1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="Weather.aspx.vb" Inherits="Weather" %>
2 
3 <!DOCTYPE html>
4 
5 <html xmlns="http://www.w3.org/1999/xhtml">
6     <head runat="server">
7         <title></title>
8     </head>
9     <body>
10        <form id="form1" runat="server">
11            <div>
12                </div>
13                <div>
14                    <asp:GridView ID="GridView1" runat="server" AllowPaging="True" AllowSorting="True" AutoGenerateColumns="False" DataKeyNames="W_Date" DataSourceID="AccessDataSource1">
15                        <Columns>
16                            <asp:CommandField ShowDeleteButton="True" ShowEditButton="True" ShowSelectButton="True" />
17                            <asp:BoundField DataField="W_Date" HeaderText="W Date" ReadOnly="True" SortExpression="W_Date" />
18                            <asp:BoundField DataField="Temperature" HeaderText="Temperature" SortExpression="Temperature" />
19                            <asp:BoundField DataField="Amount_of_Rain" HeaderText="Amount of Rain" SortExpression="Amount_of_Rain" />
20                            <asp:BoundField DataField="Description" HeaderText="Description" SortExpression="Description" />
21                        </Columns>
22                    </asp:GridView>
23                    <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharat\Downloads\Database11.accdb" DeleteCommand="DELETE FROM [Weather] WHERE `W Date` = @W_Date" InsertCommand="INSERT INTO [Weather] ([W Date], [Temperature], [Amount of Rain], [Description]) VALUES (@W_Date, @Temperature, @Amount_of_Rain, @Description)" UpdateCommand="UPDATE [Weather] SET [Temperature] = @Temperature, [Amount of Rain] = @Amount_of_Rain, [Description] = @Description WHERE `W Date` = @W_Date" />
24                    <DeleteParameters>
25                        <asp:Parameter Name="W_Date" Type="DateTime" />
26                    </DeleteParameters>
27                    <InsertParameters>
28                        <asp:Parameter Name="W_Date" Type="DateTime" />
29                        <asp:Parameter Name="Temperature" Type="Int32" />
30                        <asp:Parameter Name="Amount_of_Rain" Type="Int32" />
31                        <asp:Parameter Name="Description" Type="String" />
32                    </InsertParameters>
33                    <UpdateParameters>
34                        <asp:Parameter Name="Temperature" Type="Int32" />
35                        <asp:Parameter Name="Amount_of_Rain" Type="Int32" />
36                        <asp:Parameter Name="Description" Type="String" />
37                        <asp:Parameter Name="W_Date" Type="DateTime" />
38                    </UpdateParameters>
39                </asp:AccessDataSource>
40            </form>
41        </body>
42    </html>
43
```

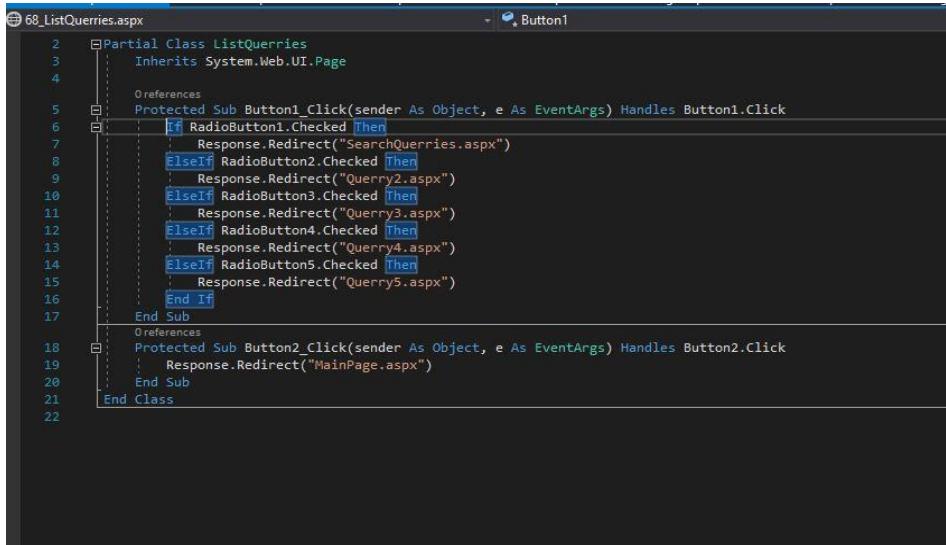
Weather Output:



The screenshot shows a web browser window displaying the Weather.aspx page. The URL is http://localhost:20045/Weather.aspx. The page contains a table with five columns: W Date, Temperature, Amount of Rain, and Description. Each row includes edit, delete, and select links. The data in the table is as follows:

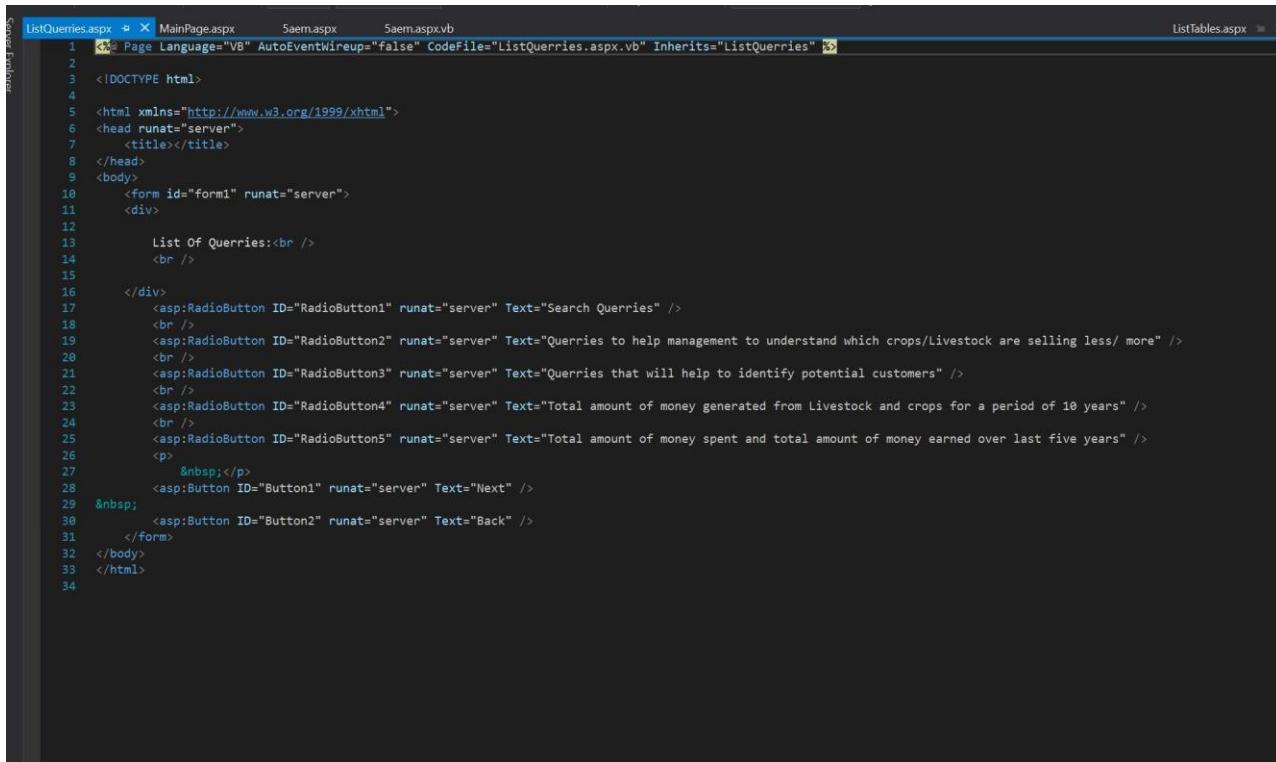
	W Date	Temperature	Amount of Rain	Description
Edit Delete Select	10/8/2018 12:00:00 AM	72	6	Rainy
Edit Delete Select	10/15/2018 12:00:00 AM	85	40	Rainy
Edit Delete Select	10/16/2018 12:00:00 AM	73	5	Rainy
Edit Delete Select	10/9/2017 12:00:00 AM	34	89	Cloudy
Edit Delete Select	10/10/2017 12:00:00 AM	78	90	Cloudy

VB code (List of Queries)



```
68_ListQuerries.aspx  Button1
1 Partial Class ListQuerries
2     Inherits System.Web.UI.Page
3
4     References
5     Protected Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
6         If RadioButton1.Checked Then
7             Response.Redirect("SearchQuerries.aspx")
8         ElseIf RadioButton2.Checked Then
9             Response.Redirect("Query2.aspx")
10        ElseIf RadioButton3.Checked Then
11            Response.Redirect("Query3.aspx")
12        ElseIf RadioButton4.Checked Then
13            Response.Redirect("Query4.aspx")
14        ElseIf RadioButton5.Checked Then
15            Response.Redirect("Query5.aspx")
16        End If
17    End Sub
18    References
19    Protected Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
20        Response.Redirect("MainPage.aspx")
21    End Sub
22 End Class
```

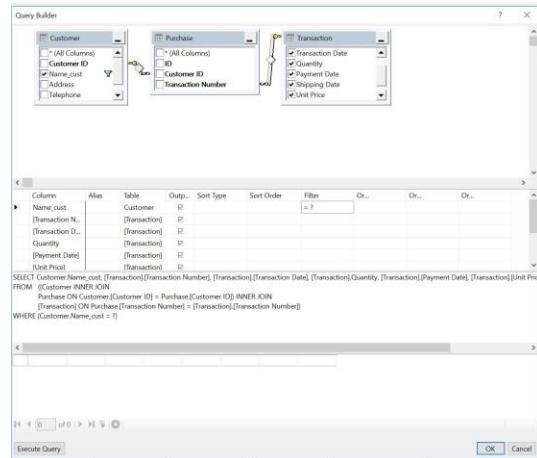
Source View:



```
ListQuerries.aspx  MainPage.aspx  Saem.aspx  Saem.aspx.vb  ListTables.aspx
1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="ListQuerries.aspx.vb" Inherits="ListQuerries" %>
2
3 <!DOCTYPE html>
4
5 <html xmlns="http://www.w3.org/1999/xhtml">
6 <head runat="server">
7     <title></title>
8 </head>
9 <body>
10    <form id="form1" runat="server">
11        <div>
12
13            List Of Querries:<br />
14            <br />
15
16        </div>
17        <asp:RadioButton ID="RadioButton1" runat="server" Text="Search Querries" />
18        <br />
19        <asp:RadioButton ID="RadioButton2" runat="server" Text="Querries to help management to understand which crops/Livestock are selling less/ more" />
20        <br />
21        <asp:RadioButton ID="RadioButton3" runat="server" Text="Querries that will help to identify potential customers" />
22        <br />
23        <asp:RadioButton ID="RadioButton4" runat="server" Text="Total amount of money generated from Livestock and crops for a period of 10 years" />
24        <br />
25        <asp:RadioButton ID="RadioButton5" runat="server" Text="Total amount of money spent and total amount of money earned over last five years" />
26        <p>
27            &nbsp;</p>
28            <asp:Button ID="Button1" runat="server" Text="Next" />
29            &nbsp;
30            <asp:Button ID="Button2" runat="server" Text="Back" />
31        </form>
32    </body>
33 </html>
```

Queries:

1a- Name of a customer and his list of Purchases SQL View (Query Builder)



Design View:

The screenshot shows the ASP.NET Design View for the file '1a.aspx'. The page contains a header bar with tabs for '1a.aspx*', 'MainPage.aspx', 'Web.config', and '2a.aspx'. Below the header is a 'Toolbox' section. The main content area contains a 'GridView' control with the following columns: Name_cust, Transaction Number, Transaction Date, Quantity, Payment Date, Unit Price, and Shipping Date. The data in the grid is as follows:

Name_cust	Transaction Number	Transaction Date	Quantity	Payment Date	Unit Price	Shipping Date
abc	0	11/6/2018 12:00:00 AM	0	11/6/2018 12:00:00 AM	0	11/6/2018 12:00:00 AM
abc	1	11/6/2018 12:00:00 AM	1	11/6/2018 12:00:00 AM	0.1	11/6/2018 12:00:00 AM
abc	2	11/6/2018 12:00:00 AM	2	11/6/2018 12:00:00 AM	0.2	11/6/2018 12:00:00 AM
abc	3	11/6/2018 12:00:00 AM	3	11/6/2018 12:00:00 AM	0.3	11/6/2018 12:00:00 AM
abc	4	11/6/2018 12:00:00 AM	4	11/6/2018 12:00:00 AM	0.4	11/6/2018 12:00:00 AM

Below the grid, the code-behind for 'AccessDataSource1' is visible:

```

AccessDataSource - AccessDataSource1

```

Source View:

The screenshot shows the ASP.NET Source View for the file '1a.aspx.vb'. The code is as follows:

```

1  <%@ Page Language="VB" AutoEventWireup="false" CodeFile="1a.aspx.vb" Inherits="1a" %>
2
3  <!DOCTYPE HTML>
4
5  <html xmlns="http://www.w3.org/1999/xhtml">
6  <head runat="server">
7      <title>1a</title>
8  </head>
9  <body>
10     <form id="form1" runat="server">
11         <div>
12             </div>
13             <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" DataSourceID="AccessDataSource1" EmptyDataText="There are no data records to display.">
14                 <Columns>
15                     <asp:BoundField DataField="Name_cust" HeaderText="Name_cust" SortExpression="Name_cust" />
16                     <asp:BoundField DataField="Transaction Number" HeaderText="Transaction Number" SortExpression="Transaction Number" />
17                     <asp:BoundField DataField="Quantity" HeaderText="Quantity" SortExpression="Quantity" />
18                     <asp:BoundField DataField="Payment Date" HeaderText="Payment Date" SortExpression="Payment Date" />
19                     <asp:BoundField DataField="Unit Price" HeaderText="Unit Price" SortExpression="Unit Price" />
20                     <asp:BoundField DataField="Shipping Date" HeaderText="Shipping Date" SortExpression="Shipping Date" />
21                 </Columns>
22             </asp:GridView>
23             <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sharan\Downloads\Database1.accdb" DeleteCommand="DELETE FROM [Customer] WHERE [Customer_ID] = @Customer_ID" InsertCommand="INSERT INTO [Customer] ([Customer_ID], [Name_cust], [Address], [Telephone], [Fax]) VALUES (@Customer_ID, @Name_cust, @Address, @Telephone, @Fax)" UpdateCommand="UPDATE [Customer] SET [Customer_ID] = @Customer_ID, [Name_cust] = @Name_cust, [Address] = @Address, [Telephone] = @Telephone, [Fax] = @Fax WHERE [Customer_ID] = @Customer_ID" SelectCommand="SELECT * FROM [Customer]">
24                 <DeleteParameters>
25                     <asp:Parameter Name="Customer_ID" Type="Int32" />
26                 </DeleteParameters>
27                 <InsertParameters>
28                     <asp:Parameter Name="Customer_ID" Type="Int32" />
29                     <asp:Parameter Name="Name_cust" Type="String" />
30                     <asp:Parameter Name="Address" Type="String" />
31                     <asp:Parameter Name="Telephone" Type="Int32" />
32                     <asp:Parameter Name="Fax" Type="Int32" />
33                 </InsertParameters>
34                 <SelectParameters>
35                     <asp:Parameter Name="?" />
36                 </SelectParameters>
37                 <UpdateParameters>
38                     <asp:Parameter Name="Name_cust" Type="String" />
39                     <asp:Parameter Name="Address" Type="String" />
40                     <asp:Parameter Name="Telephone" Type="Int32" />
41                     <asp:Parameter Name="Fax" Type="Int32" />
42                     <asp:Parameter Name="Customer_ID" Type="Int32" />
43                 </UpdateParameters>
44             </asp:AccessDataSource>
45         </form>
46     </body>
47     </html>

```

Output:

The screenshot shows a database query results window. At the top, there is a header row with columns: Name_c..., Transacti..., Transacti..., Quantity, Payment..., Unit Price, Shippin... . Below this, a single data row is displayed: Rhituraj | 3 | 10/10/20... | 80 | 10/16/20... | 60 | 10/14/20... . Below the table, there are navigation buttons (back, forward, first, last) and a message: Cell is Read Only. At the bottom left is a blue button labeled Execute Query.

1b- The name of Supplier and returns list of its outstanding orders.

Sql view:

The screenshot shows the SSMS Query Builder interface. It displays three tables: Order, Product Order, and Supplier, with their respective columns selected. The Supplier table has columns: Supplier ID, Name_sup, Address, Telephone, and Fax. The Order table has columns: Release Date, Amount Paid, Actual Delivery Date, Expected Date, and Payment Date. The Product Order table has columns: Order ID, Name_Product, and Quantity. The query builder pane at the bottom shows the generated SQL query:

```

SELECT Supplier.Name_sup, [Order].[Amount Paid], [Product Order].Name_Product, [Product Order].Quantity, [Order].[Payment Date], [Order].[Actual Delivery Date]
FROM (([Product Order] INNER JOIN [Order] ON [Product Order].[Order ID] = [Order].[Order ID]) INNER JOIN
Supplier ON [Order].[Supplier ID] = Supplier.[Supplier ID])
WHERE ([Order].[Actual Delivery Date] > ?) AND (Supplier.Name_sup = ?)
    
```

Design View:

The screenshot shows an ASP.NET page with a browser title bar: 1b.aspx*, 1a.aspx, MainPage.aspx, Web.config, 2a.aspx. The main content area contains a GridView control with the following data:

Name_sup	Amount Paid	Name_Product	Quantity	Payment Date	Actual Delivery Date
abc	0	abc	0	11/6/2018 12:00:00 AM	11/6/2018 12:00:00 AM
abc	0.1	abc	1	11/6/2018 12:00:00 AM	11/6/2018 12:00:00 AM
abc	0.2	abc	2	11/6/2018 12:00:00 AM	11/6/2018 12:00:00 AM
abc	0.3	abc	3	11/6/2018 12:00:00 AM	11/6/2018 12:00:00 AM
abc	0.4	abc	4	11/6/2018 12:00:00 AM	11/6/2018 12:00:00 AM

Below the GridView, a label indicates the data source: AccessDataSource - AccessDataSource1.

1b. Source View:

```

ListQueries.aspx   MainPage.aspx   Saem.aspx   Saem.aspx.vb   1b.aspx  □  ×
1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="1b.aspx.vb" Inherits="_1b" %>
2
3 <!DOCTYPE html>
4
5 <html xmlns="http://www.w3.org/1999/xhtml">
6 <head runat="server">
7   <title></title>
8 </head>
9 <body>
10   <form id="form1" runat="server">
11     <div>
12       </div>
13       <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" DataSourceID="AccessDataSource1" EmptyDataText="There are no data records to display.">
14         <Columns>
15           <asp:BoundField DataField="Name_sup" HeaderText="Name_sup" SortExpression="Name_sup" />
16           <asp:BoundField DataField="Amount_Paid" HeaderText="Amount Paid" SortExpression="Amount Paid" />
17           <asp:BoundField DataField="Name_Product" HeaderText="Name_Product" SortExpression="Name_Product" />
18           <asp:BoundField DataField="Quantity" HeaderText="Quantity" SortExpression="Quantity" />
19           <asp:BoundField DataField="Payment Date" HeaderText="Payment Date" SortExpression="Payment Date" />
20           <asp:BoundField DataField="Actual Delivery Date" HeaderText="Actual Delivery Date" SortExpression="Actual Delivery Date" />
21         </Columns>
22       </asp:GridView>
23       <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\agharat\Downloads\Database11.accdb" DeleteCommand="DELETE FROM [Customer] WHERE [Customer_ID] = ?" InsertCommand="INSERT INTO [Customer] ([Customer_ID], [Name_cust], [Address], [Telephone], [Fax]) VALUES (?, ?, ?, ?, ?)" UpdateCommand="UPDATE [Customer] SET [Name_cust] = ?, [Address] = ?, [Telephone] = ?, [Fax] = ? WHERE [Customer_ID] = ?" />
24         <DeleteParameters>
25           <asp:Parameter Name="Customer_ID" Type="Int32" />
26         </DeleteParameters>
27         <InsertParameters>
28           <asp:Parameter Name="Customer_ID" Type="Int32" />
29           <asp:Parameter Name="Name_cust" Type="String" />
30           <asp:Parameter Name="Address" Type="String" />
31           <asp:Parameter Name="Telephone" Type="Int32" />
32           <asp:Parameter Name="Fax" Type="Int32" />
33         </InsertParameters>
34         <SelectParameters>
35           <asp:Parameter Name="?" />
36           <asp:Parameter Name="?" />
37         </SelectParameters>
38         <UpdateParameters>
39           <asp:Parameter Name="Name_cust" Type="String" />
40           <asp:Parameter Name="Address" Type="String" />
41           <asp:Parameter Name="Telephone" Type="Int32" />
42           <asp:Parameter Name="Fax" Type="Int32" />
43           <asp:Parameter Name="Customer_ID" Type="Int32" />
44         </UpdateParameters>
45       </asp:AccessDataSource>
46     </form>
47   </body>
48 </html>
50
51
52
53
54
55
56
57
58

```

1c. The name of the Crop and returns list of customers who have purchased.

SQL view:

```

SELECT Item.Name, Item.Customer_Name cust, Customer.Address, Customer.Telephone, Customer.Fax
  FROM Item
  INNER JOIN Item_Purchase ON Item.ID = Item_Purchase.Item_ID
  INNER JOIN Purchase ON Item_Purchase.Purchase_ID = Purchase.ID
  INNER JOIN Customer ON Purchase.Customer_ID = Customer.ID
 WHERE Item.Name = 'Crop'

```

Design View:

The screenshot shows a Microsoft Visual Studio interface with multiple tabs open at the top: 1c.aspx*, 1b.aspx*, 1a.aspx, MainPage.aspx, and Web.config. The main area displays a GridView control. The grid has columns labeled 'Name_Item', 'Name_cust', 'Address', 'Telephone', and 'Fax'. The data consists of six rows, each containing the value 'abc' for all five columns. Below the grid, a label 'AccessDataSource - AccessDataSource1' is visible.

Name_Item	Name_cust	Address	Telephone	Fax
abc	abc	abc	0	0
abc	abc	abc	1	1
abc	abc	abc	2	2
abc	abc	abc	3	3
abc	abc	abc	4	4

Source View:

The screenshot shows the source code for the 1c.aspx page. The code includes the declaration of the page language as VB.NET, the definition of a GridView control with five columns, and the configuration of an AccessDataSource control named 'AccessDataSource1' which connects to a local database file ('Database111.accdb'). The AccessDataSource includes parameters for Delete, Insert, Select, and Update operations, each corresponding to specific fields in the database.

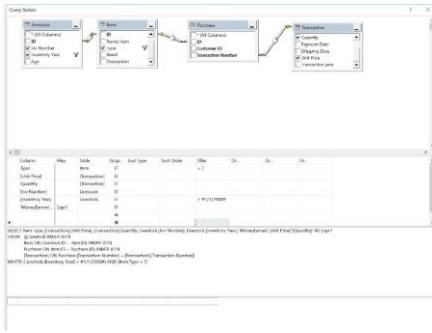
```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="1c.aspx.vb" Inherits="_1c" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            </div>
            <div>
                <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" DataSourceID="AccessDataSource1" EmptyDataText="There are no data records to display.">
                    <Columns>
                        <asp:BoundField DataField="Name_Item" HeaderText="Name_Item" SortExpression="Name_Item" />
                        <asp:BoundField DataField="Name_cust" HeaderText="Name_cust" SortExpression="Name_cust" />
                        <asp:BoundField DataField="Address" HeaderText="Address" SortExpression="Address" />
                        <asp:BoundField DataField="Telephone" HeaderText="Telephone" SortExpression="Telephone" />
                        <asp:BoundField DataField="Fax" HeaderText="Fax" SortExpression="Fax" />
                    </Columns>
                </asp:GridView>
                <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharat\Downloads\Database111.accdb" DeleteCommand="DELETE FROM `Labor` WHERE `L_Date` = ?" InsertCommand="INSERT INTO `Labor`(`Job_Description`, `Total_Amount_Paid`, `Amount_of_Money_Paid_per_Hour`, `Amount_person_used`) VALUES (?, ?, ?, ?)" SelectCommand="SELECT * FROM `Labor`" UpdateCommand="UPDATE `Labor` SET `Job_Description` = ?, `Total_Amount_Paid` = ?, `Amount_of_Money_Paid_per_Hour` = ?, `Amount_person_used` = ? WHERE `L_Date` = ?" DeleteParameters="<asp:DeleteParameters><asp:Parameter Name="L_Date" Type="DateTime" /></DeleteParameters>" InsertParameters="<asp:InsertParameters><asp:Parameter Name="L_Date" Type="DateTime" /><asp:Parameter Name="Job_Description" Type="String" /><asp:Parameter Name="Total_Amount_Paid" Type="Decimal" /><asp:Parameter Name="Amount_of_Money_Paid_per_Hour" Type="Decimal" /><asp:Parameter Name="Amount_person_used" Type="Int32" /></InsertParameters>" SelectParameters="<asp:SelectParameters><asp:Parameter Name="?" /></SelectParameters>" UpdateParameters="<asp:UpdateParameters><asp:Parameter Name="Job_Description" Type="String" /><asp:Parameter Name="Total_Amount_Paid" Type="Decimal" /><asp:Parameter Name="Amount_of_Money_Paid_per_Hour" Type="Decimal" /><asp:Parameter Name="Amount_person_used" Type="Int32" /><asp:Parameter Name="L_Date" Type="DateTime" /></UpdateParameters>"></asp:AccessDataSource>
            </div>
        </form>
    </body>
</html>
```

Output:

Name_It...	Name_c...	Address	Telephone	Fax
Item3	Lily	Tempe2	2222	222

1d. The name of the Live Stock and returns list of customers who have purchased.

SQL view.



1d. Design view

Type	Unit	Price	Quantity	Inv Number	Inventory Year	Expr1
Edit Delete Selectabc	0	0	1	11/6/2018 12:00:00 AM	abc	
Edit Delete Selectabc	0.1	1	1	11/6/2018 12:00:00 AM	abc	
Edit Delete Selectabc	0.2	2	2	11/6/2018 12:00:00 AM	abc	
Edit Delete Selectabc	0.3	3	3	11/6/2018 12:00:00 AM	abc	
Edit Delete Selectabc	0.4	4	4	11/6/2018 12:00:00 AM	abc	
Edit Delete Selectabc	0.5	5	5	11/6/2018 12:00:00 AM	abc	
Edit Delete Selectabc	0.6	6	6	11/6/2018 12:00:00 AM	abc	
Edit Delete Selectabc	0.7	7	7	11/6/2018 12:00:00 AM	abc	
Edit Delete Selectabc	0.8	8	8	11/6/2018 12:00:00 AM	abc	
Edit Delete Selectabc	0.9	9	9	11/6/2018 12:00:00 AM	abc	

Source View:

The screenshot shows the Microsoft Visual Studio IDE with the Source View tab selected. The code editor displays the source code for the file '1d.aspx'. The code includes HTML, ASP.NET controls like GridView and AccessDataSource, and C# code-behind logic. The code defines a GridView with columns for Type, Unit Price, Quantity, Inv Number, and Inventory Year. It also includes parameters for Delete, Insert, Select, and Update operations.

```
1<%@ Page Language="VB" AutoEventWireup="false" CodeFile="1d.aspx.vb" Inherits="_1d" %>
2<!DOCTYPE html>
3<html xmlns="http://www.w3.org/1999/xhtml">
4<head runat="server">
5    <title></title>
6</head>
7<body>
8    <form id="form1" runat="server">
9        <div>
10            <asp:GridView ID="GridView1" runat="server" AllowPaging="True" AllowSorting="True" AutoGenerateColumns="False" DataSourceID="AccessDataSource1" EmptyDataText="There are no items in this list.">
11                <Columns>
12                    <asp:CommandField ShowDeleteButton="True" ShowEditButton="True" ShowSelectButton="True" />
13                    <asp:BoundField DataField="Type" HeaderText="Type" SortExpression="Type" />
14                    <asp:BoundField DataField="Unit Price" HeaderText="Unit Price" SortExpression="Unit Price" />
15                    <asp:BoundField DataField="Quantity" HeaderText="Quantity" SortExpression="Quantity" />
16                    <asp:BoundField DataField="Inv Number" HeaderText="Inv Number" SortExpression="Inv Number" />
17                    <asp:BoundField DataField="Inventory Year" HeaderText="Inventory Year" SortExpression="Inventory Year" />
18                    <asp:BoundField DataField="Expr1" HeaderText="Expr1" ReadOnly="True" SortExpression="Expr1" />
19                </Columns>
20            </asp:GridView>
21            <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharat\Downloads\Database111.accdb" DeleteCommand="DELETE FROM `Livestock` WHERE [ID] = @ID" InsertCommand="INSERT INTO `Livestock` ([Type], [Unit Price], [Quantity], [Inv Number], [Inventory Year]) VALUES (@Type, @Unit Price, @Quantity, @Inv Number, @Inventory Year)" SelectCommand="SELECT * FROM `Livestock`" UpdateCommand="UPDATE `Livestock` SET [Unit Price] = @Unit Price, [Quantity] = @Quantity, [Inv Number] = @Inv Number, [Inventory Year] = @Inventory Year WHERE [ID] = @ID" DeleteParameters="DeleteParameters" InsertParameters="InsertParameters" SelectParameters="SelectParameters" UpdateParameters="UpdateParameters">
22                <DeleteParameters>
23                    <asp:Parameter Name="ID" Type="Int32" />
24                </DeleteParameters>
25                <InsertParameters>
26                    <asp:Parameter Name="ID" Type="Int32" />
27                    <asp:Parameter Name="Inv_Number" Type="Int32" />
28                    <asp:Parameter Name="Inventory_Year" Type="DateTime" />
29                    <asp:Parameter Name="Age" Type="Int32" />
30                </InsertParameters>
31                <SelectParameters>
32                    <asp:Parameter Name="?" />
33                </SelectParameters>
34                <UpdateParameters>
35                    <asp:Parameter Name="Inv_Number" Type="Int32" />
36                    <asp:Parameter Name="Inventory_Year" Type="DateTime" />
37                    <asp:Parameter Name="Age" Type="Int32" />
38                    <asp:Parameter Name="ID" Type="Int32" />
39                </UpdateParameters>
40            </asp:AccessDataSource>
41        </form>
42    </body>
43    </html>
```

1d.Output.

The screenshot shows the Microsoft Visual Studio IDE with the Output View tab selected. The interface includes a toolbar with navigation buttons (Back, Forward, New, etc.) and a status bar at the bottom. The main area displays a GridView control with the following data:

	Type	Unit Price	Quantity	Inv Number	Inventory Year
▶	Livestock	92	50	50	7/3/2011
	Livestock	60	80	150	7/4/2010
	Livestock	92	50	60	7/7/2013
	Livestock	80	90	12	7/9/2008
	Livestock	80	90	68	7/9/2007
*					

1E.

This query prompts for the name of an item (livestock or crop) and return a list of the Suppliers that provide this item.

SQL View;

Query Builder

Column Alias Table Output... Sort Type Sort Order Filter Or... Or... Or...

Column	Alias	Table	Output...	Sort Type	Sort Order	Filter	Or...	Or...	Or...
Name_Item		Item	☒			= ?			
Name_sup		Supplier	☒						
Address		Supplier	☒						
Telephone		Supplier	☒						
Fax		Supplier	☒						

```
SELECT Item.Name_Item, Supplier.Name_sup, Supplier.Address, Supplier.Telephone, Supplier.Fax
FROM ((Order) INNER JOIN
Purchase ON Order.Order_ID = Purchase.ID) INNER JOIN
Item ON Purchase.ID = Item.ID INNER JOIN
Supplier ON Purchase.Supplier_ID = Supplier.Supplier_ID
WHERE (Item.Name_Item = ?)
```

Design View.

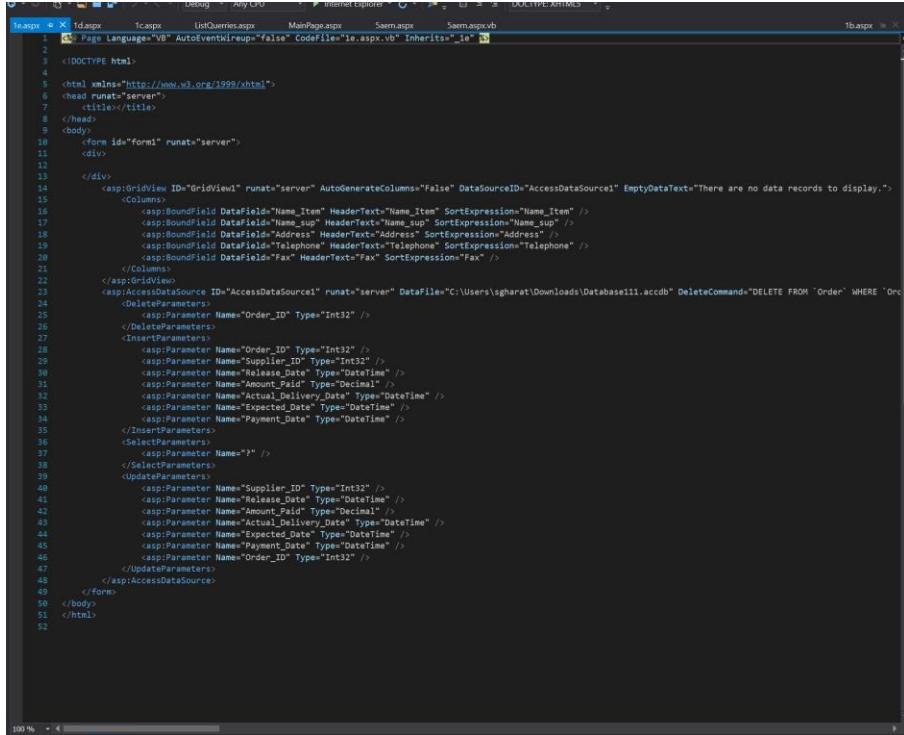
1e.aspx* 1d.aspx* 1c.aspx* 1b.aspx* 1

form#form1

Name_Item	Name_sup	Address	Telephone	Fax
abc	abc	abc	0	0
abc	abc	abc	1	1
abc	abc	abc	2	2
abc	abc	abc	3	3
abc	abc	abc	4	4

AccessDataSource - AccessDataSource1

Source View:



The screenshot shows the Source View of an ASPX page in Microsoft Visual Studio. The code is written in VB.NET and includes a GridView control, an AccessDataSource control, and various parameter definitions for insert, update, and delete operations.

```
1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="1b.aspx.vb" Inherits="1b" %>
2 
3 <!DOCTYPE html>
4 <html xmlns="http://www.w3.org/1999/xhtml">
5 <head runat="server">
6 <title></title>
7 </head>
8 <body>
9 <form id="form1" runat="server">
10 <div>
11 </div>
12 </form>
13 <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" DataSourceID="AccessDataSource1" EmptyDataText="There are no data records to display.">
14 <Columns>
15 <asp:BoundField DataField="Name_Item" HeaderText="Name_Item" SortExpression="Name_Item" />
16 <asp:BoundField DataField="Name_sup" HeaderText="Name_sup" SortExpression="Name_sup" />
17 <asp:BoundField DataField="Address" HeaderText="Address" SortExpression="Address" />
18 <asp:BoundField DataField="Telephone" HeaderText="Telephone" SortExpression="Telephone" />
19 <asp:BoundField DataField="Fax" HeaderText="Fax" SortExpression="Fax" />
20 </Columns>
21 </asp:GridView>
22 <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharati\Downloads\Database1.accdb" DeleteCommand="DELETE FROM [Order] WHERE [Order_ID] = @Order_ID" InsertCommand="INSERT INTO [Order] ([Supplier_ID], [Relisted_Date], [Amount_Paid], [Actual_Delivery_Date], [Expected_Date], [Payment_Date]) VALUES (@Supplier_ID, @Relisted_Date, @Amount_Paid, @Actual_Delivery_Date, @Expected_Date, @Payment_Date)" UpdateCommand="UPDATE [Order] SET [Supplier_ID] = @Supplier_ID, [Relisted_Date] = @Relisted_Date, [Amount_Paid] = @Amount_Paid, [Actual_Delivery_Date] = @Actual_Delivery_Date, [Expected_Date] = @Expected_Date, [Payment_Date] = @Payment_Date WHERE [Order_ID] = @Order_ID" SelectCommand="SELECT [Order_ID], [Supplier_ID], [Name_Item], [Name_sup], [Address], [Telephone], [Fax] FROM [Order]">
23 <DeleteParameters>
24 <asp:Parameter Name="Order_ID" Type="Int32" />
25 </DeleteParameters>
26 <InsertParameters>
27 <asp:Parameter Name="Order_ID" Type="Int32" />
28 <asp:Parameter Name="Supplier_ID" Type="Int32" />
29 <asp:Parameter Name="Relisted_Date" Type="DateTime" />
30 <asp:Parameter Name="Amount_Paid" Type="Decimal" />
31 <asp:Parameter Name="Actual_Delivery_Date" Type="DateTime" />
32 <asp:Parameter Name="Expected_Date" Type="DateTime" />
33 <asp:Parameter Name="Payment_Date" Type="DateTime" />
34 <asp:Parameter Name="Payment_Date" Type="DateTime" />
35 </InsertParameters>
36 <UpdateParameters>
37 <asp:Parameter Name="?" />
38 </SelectParameters>
39 <UpdateParameters>
40 <asp:Parameter Name="Supplier_ID" Type="Int32" />
41 <asp:Parameter Name="Relisted_Date" Type="DateTime" />
42 <asp:Parameter Name="Amount_Paid" Type="Decimal" />
43 <asp:Parameter Name="Actual_Delivery_Date" Type="DateTime" />
44 <asp:Parameter Name="Expected_Date" Type="DateTime" />
45 <asp:Parameter Name="Payment_Date" Type="DateTime" />
46 <asp:Parameter Name="Order_ID" Type="Int32" />
47 </UpdateParameters>
48 </asp:AccessDataSource>
49 </form>
50 </body>
51 </html>
52
```

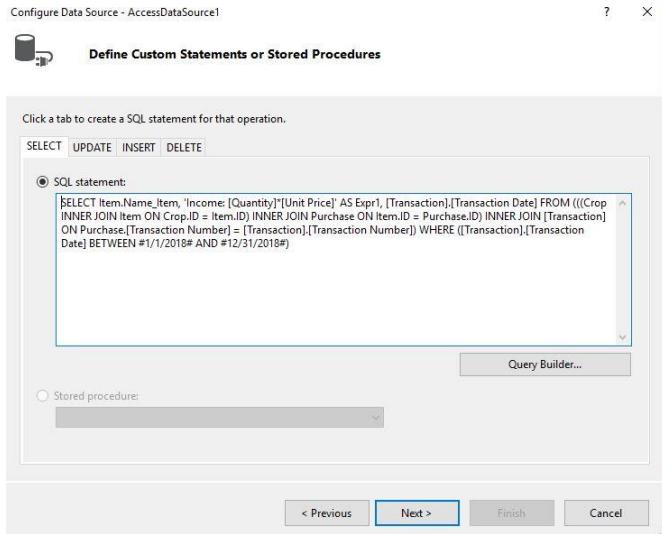
Output:



The screenshot shows the output grid from the previous source code. It displays a single row of data with the following values:

	Name_It...	Name_s...	Address	Telephone	Fax
▶	Item3	Sup2	Tempe1	1313	4545

2a. List the five crops that have generated the highest income in last year
SQL view:



Design view

The screenshot shows the ASP.NET Design view. At the top left, there is a label '2a'. Below it is a 'GridView' control displaying a table with five rows. The columns are labeled 'Name_Item', 'Expr1', and 'Transaction Date'. All rows show the same data: 'abc' in 'Name_Item', 'abc' in 'Expr1', and '11/5/2018 12:00:00 AM' in 'Transaction Date'. To the right of the GridView is a 'Label' control with the text 'AccessDataSource - AccessDataSource1'. Below the GridView is a 'Button' control with the ID 'Button1' and the text 'next'.

Name_Item	Expr1	Transaction Date
abc	abc	11/5/2018 12:00:00 AM
abc	abc	11/5/2018 12:00:00 AM
abc	abc	11/5/2018 12:00:00 AM
abc	abc	11/5/2018 12:00:00 AM

Source View:

The screenshot shows the Microsoft Visual Studio IDE with the Source View tab selected. The code editor displays the ASPX page '2a.aspx' with its VB.NET code. The code includes a GridView control bound to an AccessDataSource, which is configured to delete records from a database named 'Crop'. The code also includes a 'next' button.

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="2a.aspx.vb" Inherits="_2a" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <p>
            &nbsp;</p>
        <p>
            <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" DataSourceID="AccessDataSource1" EmptyDataText="There are no data records to display.">
                <Columns>
                    <asp:BoundField DataField="Name_Item" HeaderText="Name_Item" SortExpression="Name_Item" />
                    <asp:BoundField DataField="Expr1" HeaderText="Expr1" ReadOnly="True" SortExpression="Expr1" />
                    <asp:BoundField DataField="Transaction Date" HeaderText="Transaction Date" SortExpression="Transaction Date" />
                </Columns>
            </asp:GridView>
            <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharat\Downloads\Database11.accdb" DeleteCommand="DELETE FROM `Crop` WHERE `<DeleteParameters><asp:Parameter Name="ID" Type="Int32" /></DeleteParameters><InsertParameters><asp:Parameter Name="ID" Type="Int32" /><asp:Parameter Name="Average_Yield" Type="Int32" /></InsertParameters><UpdateParameters><asp:Parameter Name="Average_Yield" Type="Int32" /><asp:Parameter Name="ID" Type="Int32" /></UpdateParameters></asp:AccessDataSource>
        </p>
        <p>
            &nbsp;</p>
        <p>
            &nbsp;</p>
        <p>
            &nbsp;</p>
        <p>
            <asp:Button ID="Button1" runat="server" Text="next" />
        </p>
    </form>
</body>
</html>
```

Output



Name_Item	Expr1	Transaction Date
Item1	Income: [Quantity]*[Unit Price]	10/16/2018 12:00:00 AM
Item3	Income: [Quantity]*[Unit Price]	10/16/2018 12:00:00 AM
Item2	Income: [Quantity]*[Unit Price]	10/15/2018 12:00:00 AM

next

A screenshot of a web browser window. The address bar shows the URL <http://localhost:20045/zaem.aspx>. The page content displays a table with three columns: Name, Item, Income, and Transaction Date. The data in the table is as follows:

Name	Item	Income	Transaction Date
Item1		2000	10/16/2018 12:00:00 AM
Item3		2000	10/16/2018 12:00:00 AM
Item2		1500	10/15/2018 12:00:00 AM

2b. List the five livestock that have generated the highest income in the last year.

SQL View:

SQL statement:

```
SELECT Item.Name_Item, 'MoneyEarned: Max([Unit Price]*[Quantity])' AS Expr1, [Transaction].[Transaction Date]
FROM (((Livestock INNER JOIN Item ON Livestock.ID = Item.ID) INNER JOIN Purchase ON Item.ID = Purchase.ID)
INNER JOIN [Transaction] ON Purchase.[Transaction Number] = [Transaction].[Transaction Number]) WHERE
([Transaction].[Transaction Date] BETWEEN #1/1/2018# AND #12/31/2018#)
```

Design View:

The screenshot shows a Microsoft Visual Studio interface. At the top, there's a toolbar with various icons. Below the toolbar is a menu bar with 'File', 'Edit', 'View', 'Project', 'Toolbox', 'Help', and 'Recent'. The main area contains a 'GridView' control with a header row labeled 'Name_Item', 'Expr1', and 'Transaction Date'. The body of the grid has five rows, each containing 'Databound' in all three columns. Below the grid is a 'Label' control with the text 'AccessDataSource - AccessDataSource1'. At the bottom right of the design surface is a 'Next' button.

Source View:

The screenshot shows the source code for the '2b.aspx' file in Microsoft Visual Studio. The code is written in VB.NET. It includes declarations for 'Page Language="VB" AutoEventWireup="False" CodeFile="2b.aspx.vb" Inherits="2b"' and 'AccessDataSource1' with its connection string and delete command. The 'GridView1' control is defined with three columns: 'Name_Item', 'Expr1', and 'Transaction Date'. The 'Expr1' column is marked as 'ReadOnly' and 'SortExpression="Expr1"'. The 'DeleteParameters' section contains parameters for 'ID', 'Inv_Number', 'Inventory_Year', and 'Age'. The 'InsertParameters' section contains parameters for 'ID', 'Inv_Number', 'Inventory_Year', and 'Age'. The 'UpdateParameters' section contains parameters for 'Inv_Number', 'Inventory_Year', and 'Age'. The 'AccessDataSource1' control also includes parameters for 'ID', 'Inv_Number', 'Inventory_Year', and 'Age'. The page ends with a 'Next' button.

```
1 <%@ Page Language="VB" AutoEventWireup="False" CodeFile="2b.aspx.vb" Inherits="2b" %>
2 
3 <!DOCTYPE html>
4 
5 <html xmlns="http://www.w3.org/1999/xhtml">
6 <head runat="server">
7   <title></title>
8 </head>
9 <body>
10   <form id="form1" runat="server">
11     <div>
12       <p>
13         &nbsp;</p>
14       <p>
15         &nbsp;</p>
16       <p>
17         <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" DataSourceID="AccessDataSource1" EmptyDataText="There are no data records to display.">
18           <Columns>
19             <asp:BoundField DataField="Name_Item" HeaderText="Name_Item" SortExpression="Name_Item" />
20             <asp:BoundField DataField="Expr1" HeaderText="Expr1" ReadOnly="True" SortExpression="Expr1" />
21             <asp:BoundField DataField="Transaction Date" HeaderText="Transaction Date" SortExpression="Transaction Date" />
22           </Columns>
23         </asp:GridView>
24         <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharati\Downloads\Database11.accdb" DeleteCommand="DELETE FROM `Livestock` WHERE [ID] = @ID" InsertCommand="INSERT INTO `Livestock` ([Inv_Number], [Inventory_Year], [Age]) VALUES (@Inv_Number, @Inventory_Year, @Age)" UpdateCommand="UPDATE `Livestock` SET [Inv_Number] = @Inv_Number, [Inventory_Year] = @Inventory_Year, [Age] = @Age WHERE [ID] = @ID" SelectCommand="SELECT * FROM `Livestock`" SelectCountCommand="SELECT COUNT(*) FROM `Livestock`">
25           <DeleteParameters>
26             <asp:Parameter Name="ID" Type="Int32" />
27           </DeleteParameters>
28           <InsertParameters>
29             <asp:Parameter Name="ID" Type="Int32" />
30             <asp:Parameter Name="Inv_Number" Type="Int32" />
31             <asp:Parameter Name="Inventory_Year" Type="DateTime" />
32             <asp:Parameter Name="Age" Type="Int32" />
33           </InsertParameters>
34           <UpdateParameters>
35             <asp:Parameter Name="Inv_Number" Type="Int32" />
36             <asp:Parameter Name="Inventory_Year" Type="DateTime" />
37             <asp:Parameter Name="Age" Type="Int32" />
38             <asp:Parameter Name="ID" Type="Int32" />
39           </UpdateParameters>
40         </asp:AccessDataSource>
41       </p>
42     </div>
43   </form>
44 </body>
45 </html>
```

Output:

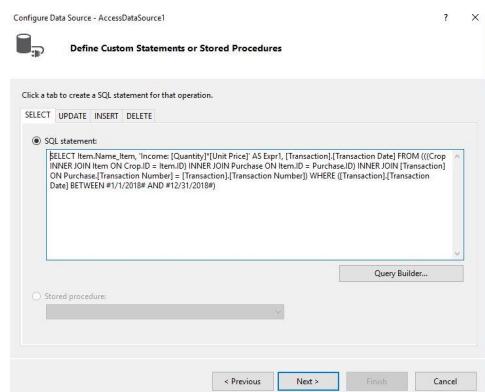
The screenshot shows two separate browser windows. The top window displays a table with three columns: Name_Item, Expr1, and Transaction Date. The data rows are Item6 and Item8, both with a value of MoneyEarned: Max([Unit Price]*[Quantity]) and a Transaction Date of 10/8/2018 12:00:00 AM. Below this table is a 'Next' button. The bottom window shows a table titled 'EXDR1 - Transaction Date' with columns Name_Item, MoneyEarned, and Transaction Date. It contains the same two rows as the top table.

Name_Item	Expr1	Transaction Date
Item6	MoneyEarned: Max([Unit Price]*[Quantity])	10/8/2018 12:00:00 AM
Item8	MoneyEarned: Max([Unit Price]*[Quantity])	10/8/2018 12:00:00 AM

Name_Item	MoneyEarned	Transaction Date
Item6	4600	10/8/2018 12:00:00 AM
Item8	4600	10/8/2018 12:00:00 AM

2.c Find the crop that has generated the lowest income in the last year.

SQL view:



SQL View:

The screenshot shows the SQL View interface. At the top, there's a toolbar with icons for Save, Undo, Redo, Cut, Copy, Paste, Find, Replace, and others. Below the toolbar is a dropdown menu labeled "Transaction". The main area contains a query builder grid with columns: Column, Alias, Table, Output..., Sort Type, Sort Order, Filter, Or..., Or..., Or... . There are three rows in the grid:

- Row 1: Name_Item, Expr1, Transaction
- Row 2: Income (Qu...), Expr1, Transaction...
- Row 3: Transaction ..., BETWEEN #1/1/2018# AND #12/31/2018#

Below the grid is a SQL query string:

```

SELECT Item.Name_Item, Income.[Quantity]*[Unit Price] AS Expr1, [Transaction].[Transaction Date]
FROM (((Crop ON ID = Item.ID) INNER JOIN
Purchase ON Item.ID = Purchase.ID) INNER JOIN
[Transaction] ON Purchase.Transaction_Number = [Transaction].[Transaction Number])
WHERE ([Transaction].[Transaction Date] BETWEEN #1/1/2018# AND #12/31/2018#)

```

At the bottom, there are navigation buttons (Home, Back, Forward, Stop, Refresh) and a status bar showing "0 of 0" and "Execute Query" buttons.

Source View:

The screenshot shows the Source View displaying the ASPX page source code. The code is written in VB.NET and includes HTML, CSS, and ASP.NET controls. Key parts of the code include:

- HTML Structure:** The page has a header with meta tags and a title, and a body containing a form and a grid view.
- ASP.NET Controls:** A GridView control is defined with ID="GridView1". It has a DataGridview control with ID="AccessDataSource1" as its DataSource. The GridView has three columns: "Name_Item", "Expr1", and "Transaction Date".
- AccessDataSource1 Configuration:** The configuration block for AccessDataSource1 includes:
 - `ConnectionString="AccessConnectionString"`
 - `DeleteCommand="DELETE FROM [Crop] WHERE [ID] = @ID"`
 - `InsertParameters="ID=Int32", "Average_Yield=Int32"`
 - `UpdateParameters="ID=Int32", "Average_Yield=Int32"`
- Scripting:** The page uses VB.NET script blocks for page events like Page_Load and Page_Error.

Design View:

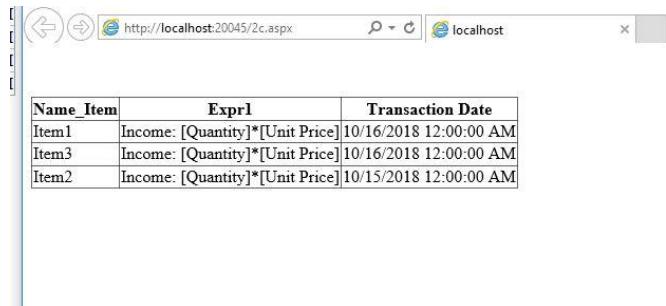
The screenshot shows the Design View of the ASPX page. It features a table with the following data:

Name_Item	Expr1	Transaction Date
abc	abc	11/5/2018 12:00:00 AM
abc	abc	11/5/2018 12:00:00 AM
abc	abc	11/5/2018 12:00:00 AM
abc	abc	11/5/2018 12:00:00 AM
abc	abc	11/5/2018 12:00:00 AM

Below the table is a placeholder for the "AccessDataSource1" control, represented by a dashed rectangle with the text "AccessDataSource - AccessDataSource1".

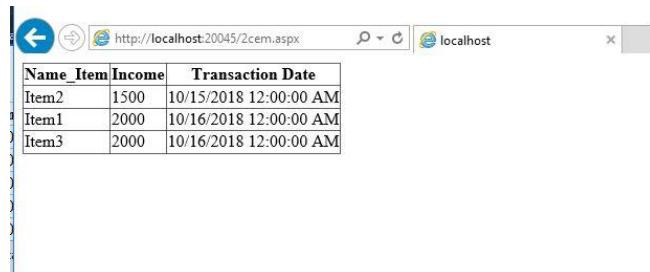
Output:

1.



Name_Item	Expr1	Transaction Date
Item1	Income: [Quantity]*[Unit Price]	10/16/2018 12:00:00 AM
Item3	Income: [Quantity]*[Unit Price]	10/16/2018 12:00:00 AM
Item2	Income: [Quantity]*[Unit Price]	10/15/2018 12:00:00 AM

2.



Name_Item	Income	Transaction Date
Item2	1500	10/15/2018 12:00:00 AM
Item1	2000	10/16/2018 12:00:00 AM
Item3	2000	10/16/2018 12:00:00 AM

2D. Find the livestock that has generated the lowest income in the last year.

SQL Code

The screenshot shows the Query Builder interface. At the top, there's a tree view under the 'Order' node with several columns checked: Order_ID, Supplier_ID, Release Date, and Amount Paid. Below this is a grid where each column is mapped to a table ('[Order]') and a sort type ('Sort Order'). The SQL query is displayed at the bottom:

```

SELECT [Order_ID], [Supplier_ID] AS Supplier_ID, [Release Date] AS Release_Date, [Amount Paid] AS Amount_Paid, [Actual Delivery Date] AS Actual_Delivery_Date, [Expected Date] AS Expected_Delivery_Date
FROM [Order]

```

Source View:

The screenshot shows the Source View tab in Visual Studio. It displays the ASPX page code for '2d.aspx'. The code includes an ASPxGridView control with various columns and an AccessDataSource control. The AccessDataSource is configured to point to an Access database file and includes parameters for Delete, Insert, Update, and Select operations. The page also contains a Button control for navigation.

```

1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="2d.aspx.vb" Inherits="_2d" %>
2
3 <!DOCTYPE HTML>
4
5 <html xmlns="http://www.w3.org/1999/xhtml">
6 <head runat="server">
7   <title></title>
8 </head>
9 <body>
10  <form id="form1" runat="server">
11    <div>
12
13      <br />
14      <br />
15      <br />
16      <br />
17      <br />
18      <br />
19      <br />
20      <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" DataKeyNames="Order_ID" DataSourceID="AccessDataSource1" EmptyDataText="There are no data items.">
21        <Columns>
22          <asp:BoundField DataField="Order_ID" HeaderText="Order_ID" ReadOnly="True" SortExpression="Order_ID" />
23          <asp:BoundField DataField="Supplier_ID" HeaderText="Supplier_ID" SortExpression="Supplier_ID" />
24          <asp:BoundField DataField="Release_Date" HeaderText="Release_Date" SortExpression="Release_Date" />
25          <asp:BoundField DataField="Amount_Paid" HeaderText="Amount_Paid" SortExpression="Amount_Paid" />
26          <asp:BoundField DataField="Actual_Delivery_Date" HeaderText="Actual_Delivery_Date" SortExpression="Actual_Delivery_Date" />
27          <asp:BoundField DataField="Expected_Delivery_Date" HeaderText="Expected_Delivery_Date" SortExpression="Expected_Delivery_Date" />
28          <asp:BoundField DataField="Payment_Date" HeaderText="Payment_Date" SortExpression="Payment_Date" />
29        </Columns>
30      </asp:GridView>
31      <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharat\Downloads\Database111.accdb" DeleteCommand="DELETE FROM `Order` WHERE `Order_ID` = @Order_ID" InsertCommand="INSERT INTO `Order`(`Supplier_ID`, `Release_Date`, `Amount_Paid`, `Actual_Delivery_Date`, `Expected_Delivery_Date`, `Payment_Date`) VALUES (@Supplier_ID, @Release_Date, @Amount_Paid, @Actual_Delivery_Date, @Expected_Delivery_Date, @Payment_Date)" UpdateCommand="UPDATE `Order` SET `Supplier_ID` = @Supplier_ID, `Release_Date` = @Release_Date, `Amount_Paid` = @Amount_Paid, `Actual_Delivery_Date` = @Actual_Delivery_Date, `Expected_Delivery_Date` = @Expected_Delivery_Date, `Payment_Date` = @Payment_Date WHERE `Order_ID` = @Order_ID" >
32        <DeleteParameters>
33          <asp:Parameter Name="Order_ID" Type="Int32" />
34        </DeleteParameters>
35        <InsertParameters>
36          <asp:Parameter Name="Order_ID" Type="Int32" />
37          <asp:Parameter Name="Supplier_ID" Type="Int32" />
38          <asp:Parameter Name="Release_Date" Type="DateTime" />
39          <asp:Parameter Name="Amount_Paid" Type="Decimal" />
40          <asp:Parameter Name="Actual_Delivery_Date" Type="DateTime" />
41          <asp:Parameter Name="Expected_Delivery_Date" Type="DateTime" />
42          <asp:Parameter Name="Payment_Date" Type="DateTime" />
43        </InsertParameters>
44        <UpdateParameters>
45          <asp:Parameter Name="Supplier_ID" Type="Int32" />
46          <asp:Parameter Name="Release_Date" Type="DateTime" />
47          <asp:Parameter Name="Amount_Paid" Type="Decimal" />
48          <asp:Parameter Name="Actual_Delivery_Date" Type="DateTime" />
49          <asp:Parameter Name="Expected_Delivery_Date" Type="DateTime" />
50          <asp:Parameter Name="Payment_Date" Type="DateTime" />
51          <asp:Parameter Name="Order_ID" Type="Int32" />
52        </UpdateParameters>
53      </asp:AccessDataSource>
54      <br />
55      <br />
56      <br />
57      <br />
58      <br />
59      <asp:Button ID="Button1" runat="server" Text="Next" />
60

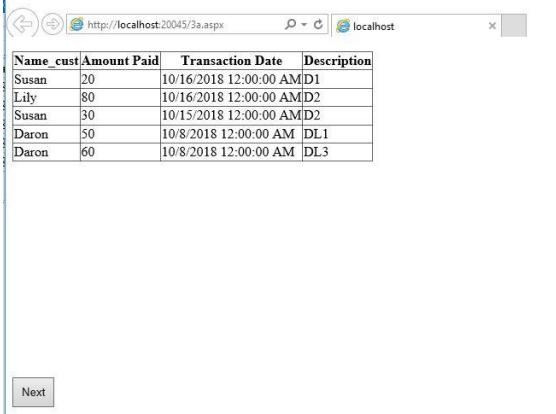
```

Design View:

Name_cust	Amount Paid	Transaction Date	Description
abc	0	11/5/2018 12:00:00 AM	abc
abc	0.1	11/5/2018 12:00:00 AM	abc
abc	0.2	11/5/2018 12:00:00 AM	abc
abc	0.3	11/5/2018 12:00:00 AM	abc
abc	0.4	11/5/2018 12:00:00 AM	abc

Next

Output 1:



Name_cust	Amount Paid	Transaction Date	Description
Susan	20	10/16/2018 12:00:00 AM	D1
Lily	80	10/16/2018 12:00:00 AM	D2
Susan	30	10/15/2018 12:00:00 AM	D2
Daron	50	10/8/2018 12:00:00 AM	DL1
Daron	60	10/8/2018 12:00:00 AM	DL3

Next

Output 2:



Name_cust	SumOfAmount Paid
Daron	110
Lily	80
Susan	50

3a.. Five Customers that have purchased the most

SQL view:

The screenshot shows the SQL query interface in SSMS. At the top, there are four tables listed: Item, Purchase, Customer, and Order. Below them is a detailed query grid with columns for Column, Alias, Table, Output Type, Sort Type, Sort Order, Filter, and Or... (repeated). The query retrieves the following columns: Customer.Name_cust, [Order].[Amount Paid], [Transaction].Transaction Date, and Item.Description. The WHERE clause specifies a date range from 1/1/2018 to 12/31/2018. The bottom part of the screenshot shows the results of the query, which is currently empty.

```

SELECT Customer.Name_cust, [Order].[Amount Paid], [Transaction].Transaction Date, Item.Description
FROM (((((Item INNER JOIN
    Item item_1 ON Item.ID = item_1.ID) INNER JOIN
    Purchase ON Item.ID = Purchase.ID AND item_1.ID = Purchase.ID) INNER JOIN
    Customer ON Purchase.CustomerID = Customer.CustomerID) INNER JOIN
    [Order] ON Purchase.ID = [Order].OrderID) INNER JOIN
    [Transaction] ON Purchase.TransactionNumber = [Transaction].TransactionNumber)
WHERE ([Transaction].Transaction Date) BETWEEN #1/1/2018# AND #12/31/2018#

```

	Name_cust	Amount Paid	Transaction Da...	Description
▶	Susan	20	10/16/2018 12:0...	D1

Source View:

The screenshot shows the ASP.NET source code for a page named 3a.aspx. It includes an ASPX page declaration, a form, and a grid view. The grid view is bound to an AccessDataSource control named "AccessDataSource1". The code also contains numerous parameter declarations for update operations, including parameters for ID, Name, Type, Breed, and Description, all of which are of type Int32 or String. The page also includes a button for navigating to the next page.

```

1 <%@ Page Language="VB" AutoEventWireup="False" CodeFile="3a.aspx.vb" Inherits="3a" %>
2 
3 <!DOCTYPE html>
4 
5 <html xmlns="http://www.w3.org/1999/xhtml">
6 <head runat="server">
7 <title></title>
8 </head>
9 <body>
10 <form id="form1" runat="server">
11 <div>
12 </div>
13 </div>
14 <p>
15 <asp:GridView ID="GridView3" runat="server" AutoGenerateColumns="False" DataSourceID="AccessDataSource1" EmptyDataText="There are no data records to display.">
16 <Columns>
17 <asp:BoundField DataField="Name_cust" HeaderText="Name_cust" SortExpression="Name_cust" />
18 <asp:BoundField DataField="Amount Paid" HeaderText="Amount Paid" SortExpression="Amount Paid" />
19 <asp:BoundField DataField="Transaction Date" HeaderText="Transaction Date" SortExpression="Transaction Date" />
20 <asp:BoundField DataField="Description" HeaderText="Description" SortExpression="Description" />
21 </Columns>
22 </asp:GridView>
23 <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharat\Downloads\Database11.accdb" DeleteCommand="DELETE FROM `Item` WHERE
24 <DeleteParameters>
25 <asp:Parameter Name="ID" Type="Int32" />
26 </DeleteParameters>
27 <InsertParameters>
28 <asp:Parameter Name="ID" Type="Int32" />
29 <asp:Parameter Name="Name_item" Type="String" />
30 <asp:Parameter Name="Type" Type="String" />
31 <asp:Parameter Name="Breed" Type="String" />
32 <asp:Parameter Name="Description" Type="String" />
33 </InsertParameters>
34 <UpdateParameters>
35 <asp:Parameter Name="Name_item" Type="String" />
36 <asp:Parameter Name="Type" Type="String" />
37 <asp:Parameter Name="Breed" Type="String" />
38 <asp:Parameter Name="Description" Type="String" />
39 <asp:Parameter Name="ID" Type="Int32" />
40 </UpdateParameters>
41 </asp:AccessDataSource>
42 </p>
43 <p>
44 <asp:Button ID="Button1" runat="server" Height="35px" style="margin-top: 237px" Text="Next" />
45 </p>
46 </div>
47 </body>
48 </html>
49

```

Design View:

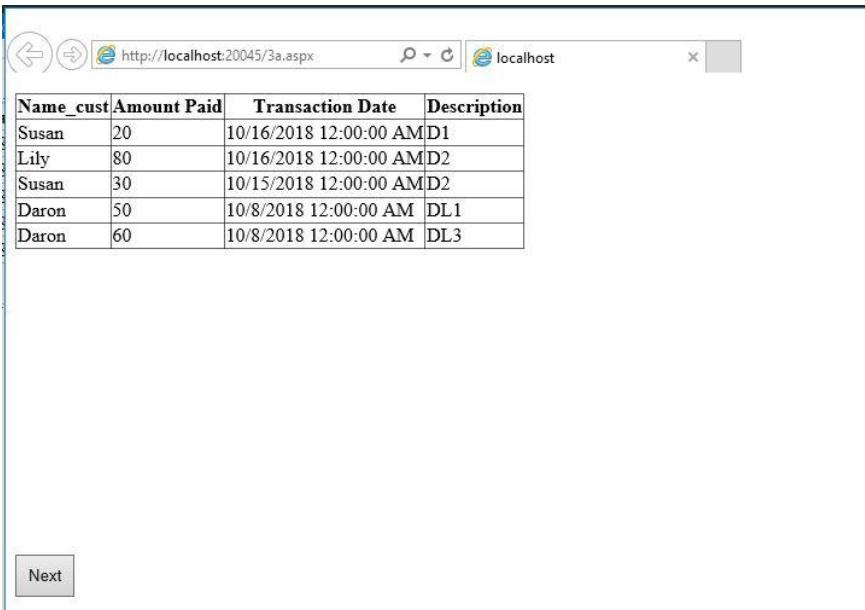
P

Name_cust	Amount Paid	Transaction Date	Description
abc	0	11/5/2018 12:00:00 AM	abc
abc	0.1	11/5/2018 12:00:00 AM	abc
abc	0.2	11/5/2018 12:00:00 AM	abc
abc	0.3	11/5/2018 12:00:00 AM	abc
abc	0.4	11/5/2018 12:00:00 AM	abc

AccessDataSource - AccessDataSource1

Next

Output:



A screenshot of a web browser window displaying a table of transaction data. The browser interface includes a back/forward button, a search bar, and a tab labeled 'localhost'. The table has four columns: Name_cust, Amount Paid, Transaction Date, and Description. The data shows transactions for Susan, Lily, Daron, and Daron, with amounts ranging from 20 to 60 and dates from 10/15/2018 to 10/16/2018.

Name_cust	Amount Paid	Transaction Date	Description
Susan	20	10/16/2018 12:00:00 AM	D1
Lily	80	10/16/2018 12:00:00 AM	D2
Susan	30	10/15/2018 12:00:00 AM	D2
Daron	50	10/8/2018 12:00:00 AM	DL1
Daron	60	10/8/2018 12:00:00 AM	DL3

Next

The screenshot shows a Microsoft Internet Explorer window with the URL <http://localhost:20045/3aem.aspx>. The page contains a single **GridView** control with the following data:

Name_cust	SumOfAmount Paid
Daron	110
Lily	80
Susan	50

3b. Five Customers that have purchased the most in last Five Years

SQL CODE:

The screenshot shows a SQL query editor window with a "Test Query" button. The query is:

```
SELECT * FROM [Query3a]
```

Source View;

The screenshot shows the "Source View" of the ASPX page 3aem.aspx. The code includes:

```

1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="3b.aspx.vb" Inherits="3b" %>
2
3 <!DOCTYPE html>
4
5 <html xmlns="http://www.w3.org/1999/xhtml">
6 <head runat="server">
7   <title></title>
8 </head>
9 <body style="height: 34px">
10   <form id="form1" runat="server">
11     <div>
12       <div>
13         <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" DataSourceID="AccessDataSource1" EmptyDataText="There are no data records to display.">
14           <Columns>
15             <asp:BoundField DataField="Name_cust" HeaderText="Name_cust" SortExpression="Name_cust" />
16             <asp:BoundField DataField="Amount Paid" HeaderText="Amount Paid" SortExpression="Amount Paid" />
17           </Columns>
18         </asp:GridView>
19       <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\gsharaf\Downloads\Database11.accdb" SelectCommand="SELECT * FROM [Query3a]"></asp:
20
21       </form>
22     </body>
23   </html>
24

```

Design View

Name_cust **Amount Paid**

abc	0
abc	0.1
abc	0.2
abc	0.3
abc	0.4

AccessDataSource - AccessDataSource1

Output:

<http://localhost:20045/3b.aspx>

Name_cust **Amount Paid**

Daron	50
Daron	60
Lily	80
Susan	20
Susan	30

3c. Five Supplier from which the company has purchased the most SQL View:

```

SELECT
    [Supplier].[Name_sup] AS [Order].[Amount Paid], [Transaction].[Transaction Date]
FROM
    (((((Product Order INNER JOIN
        [Order] ON Product Order.[Order ID] = [Order].[Order ID]) INNER JOIN
        Item ON Product Order.[Order ID] = Item.[ID]) INNER JOIN
        Purchase ON Item.[ID] = Purchase.[Item ID]) INNER JOIN
        Customer ON Purchase.[Customer ID] = Customer.[ID]) INNER JOIN
        [Supplier] ON Purchase.[Supplier ID] = [Supplier].[ID]) INNER JOIN
        [Transaction] ON Purchase.[Transaction Number] = [Transaction].[Transaction Number]
        [Supplier].[Name_sup] = [Order].[Amount Paid], [Transaction].[Transaction Date]
        BETWEEN #1...
    ORDER BY [Amount Paid] DESC
    TOP 5

```

Source View:

Design View:

Name	up Amount Paid	Transaction Date
abc	0	11/5/2018 12:00:00 AM
abc	0.1	11/5/2018 12:00:00 AM
abc	0.2	11/5/2018 12:00:00 AM
abc	0.3	11/5/2018 12:00:00 AM
abc	0.4	11/5/2018 12:00:00 AM

AccessDataSource - AccessDataSource1

--

Output 1:

Name	Sup	Amount Paid	Transaction Date
sup1	20	10/16/2018 12:00:00 AM	
sup1	20	10/16/2018 12:00:00 AM	
sup2	80	10/16/2018 12:00:00 AM	
sup1	30	10/15/2018 12:00:00 AM	
sup5	50	10/8/2018 12:00:00 AM	

Output 2:

Name_sup	SumOfAmount Paid
Sup1	50
Sup2	80
Sup4	60
Sup5	50

3D: Five Suppliers from whom company has purchased the most in five years.
SQL VIEW:

Design View:

The screenshot shows the Visual Studio Design View for a web page named '3d.aspx'. At the top, there are tabs for '3e.aspx', '3d.aspx' (which is selected), '3cem.aspx', '3c.aspx', '3b.aspx', and '3aem.aspx'. Below the tabs, the page body contains a table with four columns: 'Name_sup', 'Amount Paid Expr1', and 'Release Date'. The table has five rows, each containing the value 'abc' for 'Name_sup', numerical values for 'Amount Paid Expr1' (0, 0.1, 0.2, 0.3, 0.4), and the same date '11/5/2018 12:00:00 AM' for 'Release Date'. Below the table is a 'AccessDataSource - AccessDataSource1' control.

Output:

The screenshot shows a web browser window with the URL 'http://localhost:20045/3d.aspx'. The browser interface includes back and forward navigation buttons, a search bar, and a 'localhost' status bar. The main content area displays a table with two columns: 'Name_sup' and 'Amount Paid'. The table has five rows, showing data for 'Sup1', 'Sup2', 'Sup4', and 'Sup5' with their respective amounts: 20, 80, 60, and 50.

3E.

List the Suppliers that have a late shipment during last year
SQL view:

Query Builder

Column Alias Table Output Sort Type Sort Order Filter Or... Or... Or... Or...

Name_sup Supplier [Order] >= 0

[Amount Paid] [Order] BETWEEN #1/1/2018# AND #12/31/2018#

[Release Date] [Order]

```
SELECT Supplier.Name_sup, [Order].[Amount Paid], DateDiff(, d, [Order].[Actual Delivery Date]), [Order].[Expected Date]) AS Expr1, [Order].[Release Date]
FROM
    Supplier INNER JOIN
    Crop ON Supplier.ID = Crop.ID INNER JOIN
    Purchase ON Item.ID = Purchase.ID INNER JOIN
    Customer ON Purchase.CustomerID = Customer.ID) INNER JOIN
    Order ON Order.SupplierID = (Supplier.ID) INNER JOIN
    Supplier ON Order.SupplierID = Supplier.ID
WHERE
    (DateDiff(, d, [Order].[Actual Delivery Date], [Order].[Expected Date])) >= 0 AND ([Order].[Release Date] BETWEEN #1/1/2018# AND #12/31/2018#)
```

Source View:

```
<%@ Page Language="VB" AutoEventWireup="False" CodeFile="3d.aspx.vb" Inherits="3d" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <div>
                <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" DataSourceID="AccessDataSource1" EmptyDataText="There are no data records to display.">
                    <Columns>
                        <asp:BoundField DataField="Name_sup" HeaderText="Name_sup" SortExpression="Name_sup" />
                        <asp:BoundField DataField="Amount Paid" HeaderText="Amount Paid" SortExpression="Amount Paid" />
                    </Columns>
                </asp:GridView>
            </div>
        </div>
    </form>
</body>
</html>
```

Design View:

Name_sup	Amount Paid	Expr1	Release Date
abc	0	0	11/5/2018 12:00:00 AM
abc	0.1	1	11/5/2018 12:00:00 AM
abc	0.2	2	11/5/2018 12:00:00 AM
abc	0.3	3	11/5/2018 12:00:00 AM
abc	0.4	4	11/5/2018 12:00:00 AM

Output:

Name_sup	Amount Paid	Expr1	Release Date
Sup1	20	2	9/3/2018 12:00:00 AM
Sup1	30	2	9/16/2018 12:00:00 AM

4a.

SQL

```
SELECT Total_Amount, Expr1, Item.Type, [Transaction].[Transaction year], Weather.Description
FROM (Item INNER JOIN
      Purchase ON Item.ID = Purchase.ID) INNER JOIN
      [Transaction] ON Purchase.[Transaction Number] = [Transaction].[Transaction Number] INNER JOIN
      Weather ON [Transaction].[Transaction Date] = Weather.W_Date
```

Source View:

```
1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="4sem.aspx.vb" Inherits="4sem" %>
2
3 <DOCTYPE html>
4
5 <html xmlns="http://www.w3.org/1999/xhtml">
6   <head runat="server">
7     <title></title>
8   </head>
9   <body>
10    <form id="form1" runat="server">
11      <div>
12
13        </div>
14        <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" DataSourceID="AccessDataSource1" EmptyDataText="There are no data records to display.">
15          <Columns>
16            <asp:BoundField DataField="SumOfTotal Amount" HeaderText="SumOfTotal Amount" SortExpression="SumOfTotal Amount" />
17            <asp:BoundField DataField="Type" HeaderText="Type" SortExpression="Type" />
18            <asp:BoundField DataField="Transaction year" HeaderText="Transaction year" SortExpression="Transaction year" />
19            <asp:BoundField DataField="Description" HeaderText="Description" SortExpression="Description" />
20          </Columns>
21        </asp:GridView>
22        <asp:AccessDataSource ID="AccessDataSource1" runat="server" Datafile="C:\Users\sgharat\Downloads\Database11.accdb" SelectCommand="SELECT * FROM [Query4a1]"></asp:
23      </form>
24    </body>
25  </html>
```

Design View:

Expr1	Type	Transaction year	Description
abc	abc	0	abc
abc	abc	1	abc
abc	abc	2	abc
abc	abc	3	abc
abc	abc	4	abc

AccessDataSource - AccessDataSource1

Output 1:

Expr1	Type	Transaction year	Description
Total Amount: [Unit Price]*[Quantity]	Crop	2018	Rainy
Total Amount: [Unit Price]*[Quantity]	Crop	2018	Rainy
Total Amount: [Unit Price]*[Quantity]	Crop	2018	Rainy
Total Amount: [Unit Price]*[Quantity]	Crop	2017	Cloudy
Total Amount: [Unit Price]*[Quantity]	Crop	2017	Cloudy
Total Amount: [Unit Price]*[Quantity]	Livestock	2018	Rainy
Total Amount: [Unit Price]*[Quantity]	Livestock	2017	Cloudy
Total Amount: [Unit Price]*[Quantity]	Livestock	2018	Rainy
Total Amount: [Unit Price]*[Quantity]	Livestock	2017	Cloudy
Total Amount: [Unit Price]*[Quantity]	Livestock	2017	Cloudy

Output 2:

SumOfTotal Amount	Type	Transaction year	Description
4800	Crop	2017	Cloudy
3500	Crop	2018	Rainy
12000	Livestock	2017	Cloudy
4600	Livestock	2018	Rainy

5a. SQL

Query Builder

```

SELECT Labor.[Total Amount Paid], TotalMoneyEarned, [Unit Price]*[Quantity] AS Expr1, [Transaction].[Transaction Date]
FROM ((Purchase INNER JOIN Item ON Purchase.ID = Item.ID) INNER JOIN
      [Transaction] ON Purchase.Transaction Number = [Transaction].[Transaction Number]) INNER JOIN
      Labor ON [Transaction].[Transaction Date] = Labor.L_Date
WHERE [Transaction].[Transaction Date] BETWEEN #1/1/2013# AND #12/31/2018#
  
```

Source View:

```

3.aspx 3d.aspx 3c.aspx 3b.aspx 3a.aspx 2d.aspx 2c.aspx 2b.aspx 2a.aspx 1e.aspx 1d.aspx 1c.aspx 3em.aspx
1 <%@ Page Language="VB" AutoEventWireup="false" CodeFile="3em.aspx.vb" Inherits="_3em" %>
2
3 <!DOCTYPE html>
4 <html xmlns="http://www.w3.org/1999/xhtml">
5   <head runat="server">
6     <title></title>
7   </head>
8   <body>
9     <form id="form1" runat="server">
10       <div>
11         </div>
12       </div>
13       <div>
14         <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" DataSourceID="AccessDataSource1" EmptyDataText="There are no data records to display.">
15           <Columns>
16             <asp:BoundField DataField="SumOfTotal Amount Paid" HeaderText="SumOfTotal Amount Paid" SortExpression="SumOfTotal Amount Paid" />
17             <asp:BoundField DataField="SumOfTotal!MoneyEarned" HeaderText="SumOfTotal!MoneyEarned" SortExpression="SumOfTotal!MoneyEarned" />
18           </Columns>
19         </asp:GridView>
20         <asp:AccessDataSource ID="AccessDataSource1" runat="server" DataFile="C:\Users\sgharat\Downloads\Database11.accdb" SelectCommand="SELECT * FROM [Query5a1]"></asp:
21       </form>
22     </body>
23   </html>
24
  
```

Design view:

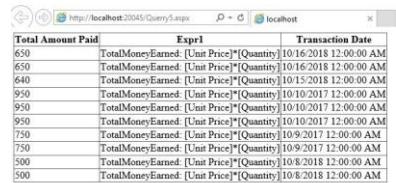
Total Amount Paid	Expr1	Transaction Date
0	abc	11/5/2018 12:00:00 AM
0.1	abc	11/5/2018 12:00:00 AM
0.2	abc	11/5/2018 12:00:00 AM
0.3	abc	11/5/2018 12:00:00 AM
0.4	abc	11/5/2018 12:00:00 AM

AccessDataSource - AccessDataSource1

asp:button#Button1

Next

Output 1:



A screenshot of a web browser window titled "localhost". The URL is "http://localhost:20045/Query5.aspx". The page displays a table with three columns: "Total Amount Paid", "Expr1", and "Transaction Date". The data consists of ten rows, each containing a value for "Total Amount Paid" followed by the expression "TotalMoneyEarned: [Unit Price]*[Quantity]" and a corresponding date.

Total Amount Paid	Expr1	Transaction Date
650	TotalMoneyEarned: [Unit Price]*[Quantity]	10/16/2018 12:00:00 AM
650	TotalMoneyEarned: [Unit Price]*[Quantity]	10/16/2018 12:00:00 AM
640	TotalMoneyEarned: [Unit Price]*[Quantity]	10/15/2018 12:00:00 AM
950	TotalMoneyEarned: [Unit Price]*[Quantity]	10/10/2017 12:00:00 AM
950	TotalMoneyEarned: [Unit Price]*[Quantity]	10/10/2017 12:00:00 AM
950	TotalMoneyEarned: [Unit Price]*[Quantity]	10/10/2017 12:00:00 AM
750	TotalMoneyEarned: [Unit Price]*[Quantity]	10/9/2017 12:00:00 AM
750	TotalMoneyEarned: [Unit Price]*[Quantity]	10/9/2017 12:00:00 AM
500	TotalMoneyEarned: [Unit Price]*[Quantity]	10/8/2018 12:00:00 AM
500	TotalMoneyEarned: [Unit Price]*[Quantity]	10/8/2018 12:00:00 AM

[Next](#)

Output 2:



A screenshot of a web browser window titled "localhost". The URL is "http://localhost:20045/5aem.aspx". The page displays a table with two columns: "SumOfTotal Amount Paid" and "SumOfTotalMoneyEarned". There is one row with the values 3490 and 20100 respectively.

SumOfTotal Amount Paid	SumOfTotalMoneyEarned
3490	20100