

Appendix

Initial Consultation Transcript

Good evening Miss. How are you?

Good evening. I am well, thank you.

Would you please describe yourself and your business?

I am a housewife as well as a small business owner. I own a food brand named “Cihen Kitchen” that sells various kinds of food which I started a few years ago. I manage my business using Instagram, where I post pictures of my products.

Can you please describe your current system?

Currently, I record incoming orders as well as customer information into a notebook. Whenever a customer makes an order, I will calculate the total price of all products purchased using a calculator, before informing him of the amount to be paid. Every month when I am managing my expenses, I will also calculate the total revenue and cost of all orders manually.

What problems do you have with your current system?

Sometimes, I would make mistakes in calculations and as a result inform my customers of the wrong amount due. They would then accuse me of trying to scam them, and there were times I lost customers because of this issue. Besides this, I would also make errors in writing down the products within orders, leading to wrong products being shipped to the wrong people. When shipping orders, I would have to look for the customer’s address in my notebook, which is time-consuming. Overall, I find this system to be inefficient.

What ideas do you have to replace or improve this order management system?

I think having an application with all these functionalities will be useful.

What features do you wish to be present in the product?

Aside from the functionalities I have mentioned before, it will also be great if the application has the ability to depict certain trends in sales, whether that be displaying top customers or popular products.

What other concerns do you have in regards to the final product?

My main concern is regarding the usability of the product. I would prefer it to be as easy to use as possible as I am not very good with technology.

That marks the end of this interview. Thank you for your time.

It's my pleasure.

Client signature:

A handwritten signature in black ink, consisting of a stylized 'M' followed by a checkmark-like flourish.

Date: February 26, 2022

Feedback from client Transcript

How satisfied are you by the final product?

I feel like the application is up to standard.

Do you think the overall product will solve your problem?

Yes, for the time I have tried it, it is incredibly helpful in managing orders. I can see myself using this application in the future.

Is the application as per your expectations?

Yes, I expected it to be a major upgrade from my previous system so this definitely exceeded my expectations.

Which aspects of the product were you most satisfied about?

I liked how simple everything was. The function of each page was self-explanatory and I particularly enjoyed how everything was labelled properly. I could see that my concern about the ease of use of the application was greatly considered in its development.

Which aspects of the product do you feel can be improved?

I feel like the design or layout of the overall application can be upgraded to be more appealing to the eyes as right now it looks rather plain.

Do you have any recommendations for future developments of the product?

I would have liked a way for me to automatically calculate the number of ingredients I need for one or a group of orders so that I am able to know how much of each I will need to purchase. Also, I noticed that I am only able to have one username and

password. If possible, it would be nice to implement multiple usernames all with different pages each can access. For example, a specific username may only be able to read pending orders but not edit them. Additionally, listing down the top 5 least sold products may also be nice in the report pages so that I would be able to see which products I should replace.

Does the product meet all of the success criteria?

Yes

Client signature:

A handwritten signature in black ink, consisting of a stylized 'S' followed by a checkmark-like flourish.

Date: November 16, 2022

Code

1. Login Page

1.1 Page Design



The image shows a login page design. At the top center is a circular logo for "Cihen Kitchen". The logo has a pink background with the text "Cihen Kitchen" in a stylized font. Above the text is a small illustration of a cat's face. The text "homemade with love" is written in a small font above the main text. Below the logo, there are two input fields: "Username:" and "Password:". Below these fields is a "Login" button.

1.2 Visual Basic Code

```
Partial Class login
    Inherits System.Web.UI.Page
    Protected Sub loginbutton_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles loginbutton.Click
        Dim reader As Data.IDataReader =
CType(LoginDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        reader.Read()
        If uname.Text = reader("Username") Then
            If pass.Text = reader("Password") Then
                MsgBox("Access Granted")
                Response.Redirect("home.aspx")
            Else
                MsgBox("Wrong password")
            End If
        Else
            MsgBox("Wrong username")
        End If
    End Sub
End Class
```

1.2 ASPX Code

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="login.aspx.vb"
Inherits="login" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
    <title>Login Page</title>
```

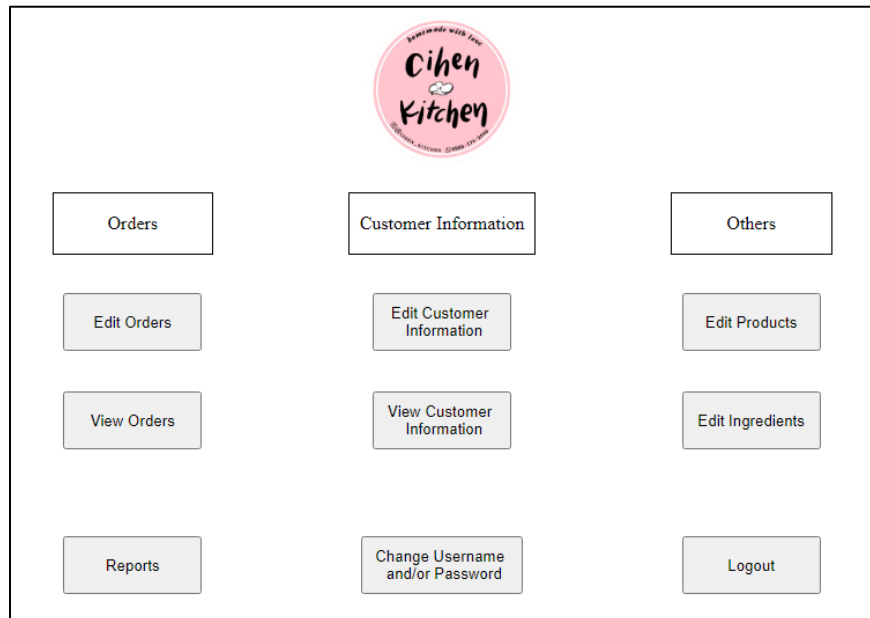
```

</head>
<body>
    <form id="form1" runat="server">
        <table style="margin:auto;width:20%;margin-top:10%;text-align:left">
            <tr>
                <td colspan="2" align="center">
                    <asp:Image ID="Image1" runat="server" ImageUrl="logo.png" Width="50%"/>
                </td>
            </tr>
            <tr>
                <td>
                    <asp:Label ID="Username" runat="server" Text="Username:"></asp:Label>
                </td>
                <td>
                    <asp:TextBox ID="uname" runat="server" AutoCompleteType="Disabled"
autocomplete="off"></asp:TextBox>
                </td>
            </tr>
            <tr>
                <td>
                    <asp:Label ID="Password" runat="server" Text="Password:"></asp:Label>
                </td>
                <td>
                    <asp:TextBox ID="pass" runat="server"
TextMode="Password"></asp:TextBox>
                </td>
            </tr>
            <tr>
                <td colspan="2">
                    <asp:Button ID="loginbutton" runat="server" Text="Login" />
                </td>
            </tr>
        </table>
        <asp:AccessDataSource ID="LoginDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Login]">
        </asp:AccessDataSource>
    </form>
</body>
</html>

```

2. Home Page

2.1 Page Design



2.2 Visual Basic Code

```
Partial Class home
    Inherits System.Web.UI.Page
    Protected Sub ChangeUnamePassButton_Click(sender As Object, e As EventArgs) Handles
ChangeUnamePassButton.Click
        changeUnamePass()
    End Sub
    Public Sub changeUnamePass()
        Dim ans, ans1, ans2 As String
        Dim reader As Data.IDataReader =
CType(LoginDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        reader.Read()
        ans1 = InputBox("Username", DefaultResponse:=reader("Username"))
        ans2 = InputBox("Password", DefaultResponse:=reader("Password"))
        reader.Close()
        If ans1 <> "" And ans2 <> "" Then
            ans = MsgBox("Is the information provided below correct?" & vbCrLf & vbCrLf &
"Username: " & ans1 & vbCrLf & "Password: " & ans2, MsgBoxStyle.YesNo)
            If ans = MsgBoxResult.Yes Then
                LoginDataSource.UpdateParameters("uname").DefaultValue = ans1
                LoginDataSource.UpdateParameters("pass").DefaultValue = ans2
                LoginDataSource.Update()
                MsgBox("Username and Password successfully updated.")
            Else
                MsgBox("Please reenter the Username and Password.")
                changeUnamePass()
            End If
        End If
    End Sub
End Class
```

2.3 ASPX Code

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="home.aspx.vb"
Inherits="home" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
    <title>Home</title>
    <link rel="stylesheet" href="ia.css" />
</head>
<body>
    <form id="Home" runat="server">
        <table style="margin:auto;width:50%;text-align:center;margin-top:1%"
cellspacing="0px">
            <tr>
                <td align="center" colspan="5">
                    <asp:Image runat="server" ImageUrl="~/logo.PNG" Width="20%" />
                </td>
            </tr>
            <tr>
                <td colspan="5">
                    &nbsp;
                </td>
            </tr>
            <tr align="center">
                <td style="border:1px solid black;height:50px;width:100px">
                    <asp:Label ID="OrdersLabel" runat="server" Text="Orders">
</asp:Label>
                </td>
                <td style="width:100px">
                    &nbsp;
                </td>
                <td style="border:1px solid black;height:50px;width:100px">
                    <asp:Label ID="CustomerLabel" runat="server" Text="Customer Information">
</asp:Label>
                </td>
                <td style="width:100px">
                    &nbsp;
                </td>
                <td style="border:1px solid black;height:50px;width:100px">
                    <asp:Label ID="OthersLabel" runat="server" Text="Others">
</asp:Label>
                </td>
            </tr>
            <tr>
                <td style="height:30px">
                    &nbsp;
                </td>
                <td style="height:30px">
                    &nbsp;
                </td>
                <td style="height:30px">
                    &nbsp;
                </td>
                <td style="height:30px">
                    &nbsp;
                </td>
            </tr>
        </table>
    </form>
</body>
</html>
```



```

        &nbsp;
    </td>
    <td style="height:30px">
        &nbsp;
    </td>
</tr>
<tr align="center">
    <td>
        <asp:Button ID="EditOrdersButton" runat="server" Text="Edit Orders"
Width="120px" height="50px" PostBackUrl="~/Edit_Orders.aspx"/>
    </td>
    <td style="width:100px">
        &nbsp;
    </td>
    <td>
        <asp:Button ID="EditCustomerButton" runat="server" Text="Edit Customer &#13;
Information" Width="120px" height="50px" PostBackUrl="~/Edit_CustInfo.aspx"/>
    </td>
    <td style="width:100px">
        &nbsp;
    </td>
    <td>
        <asp:Button ID="EditProductButton" runat="server" Text="Edit Products"
Width="120px" height="50px" PostBackUrl="~/Edit_Products.aspx"/>
    </td>
</tr>
<tr>
    <td style="height:30px">
        &nbsp;
    </td>
    <td style="height:30px">
        &nbsp;
    </td>
    <td style="height:30px">
        &nbsp;
    </td>
    <td style="height:30px">
        &nbsp;
    </td>
    <td style="height:30px">
        &nbsp;
    </td>
    <td style="height:30px">
        &nbsp;
    </td>
</tr>
<tr align="center">
    <td style="height: 52px">
        <asp:Button ID="ViewOrdersButton" runat="server" Text="View Orders"
Width="120px" height="50px" PostBackUrl="~/View_Orders.aspx"/>
    </td>
    <td style="width:100px; height: 52px;">
        &nbsp;
    </td>
    <td style="height: 52px">
        <asp:Button ID="ViewCustomerButton" runat="server" Text="View Customer &#13;
Information" Width="120px" height="50px" PostBackUrl="~/View_CustInfo.aspx"/>
    </td>
    <td style="width:100px; height: 52px;">
        &nbsp;
    </td>

```

```

        <td style="height: 52px">
            <asp:Button ID="EditIngredientsButton" runat="server" Text="Edit
Ingredients" Width="120px" height="50px" PostBackUrl="~/Edit_Ingredients.aspx"/>
        </td>
    </tr>
    <tr>
        <td colspan="5" style="height:70px">
            &nbsp;
        </td>
    </tr>
    <tr>
        <td>
            <asp:Button ID="ReportsButton" runat="server" Text="Reports"
Width="120px" height="50px" PostBackUrl="~/Reports.aspx"/>
        </td>
        <td>
            &nbsp;
        </td>
        <td>
            <asp:Button ID="ChangeUnamePassButton" runat="server" Text="Change
Username &#13; and/or Password" Width="140px" height="50px"/>
        </td>
        <td>
            &nbsp;
        </td>
        <td>
            <asp:Button ID="LogoutButton" runat="server" Text="Logout"
Width="120px" height="50px" PostBackUrl="~/login.aspx"/>
        </td>
    </tr>
</table>
<asp:AccessDataSource ID="LoginDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Login]"
UpdateCommand="UPDATE Login SET Login.[Username] = @uname,
Login.[Password] = @pass">
    <UpdateParameters>
        <asp:Parameter Name="uname" DefaultValue="" />
        <asp:Parameter Name="pass" DefaultValue="" />
    </UpdateParameters>
</asp:AccessDataSource>

</form>
</body>
</html>

```

3. Edit Orders Page

3.1 Page Design

Order ID: 1

Date of Order: 15/01/2023

Date to be Shipped: / /

Name:

☒ Ready to be shipped?

☒ Paid?

Status:

Product to be Deleted:

Product_Name	Amount
Product_Name	1

3.2 Visual Basic Code

```
Imports System.Web.Services
Imports System.Data
Imports System.Data.OleDb
Imports System.Collections.Generic
Partial Class Edit_Orders
    Inherits System.Web.UI.Page
    Public Sub displayInformation(ByVal flag As Integer)
        Dim nextflag As Boolean = False
        Dim shipdate As Date
        Dim tempid As Integer
        If flag = -1 Then
            Dim linkedreader As Data.IDataReader =
CType(LinkedLoadDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            While linkedreader.Read()
                tempid = linkedreader("Order_ID")
                If tempid = getMaxID() Then
                    OrderIDData.Text = tempid
                    NameDropDownList.Text = linkedreader("Customer_Name")
                    DateofOrderData.Text = linkedreader("Date_of_Order")
                    shipdate = linkedreader("Date_to_be_Shipped")
                    DayInput.Text = Day(shipdate)
                    MonthInput.Text = Month(shipdate)
                    YearInput.Text = Year(shipdate)
                Exit While
            End If
        End If
    End Sub
End Class
```

```

End While
linkedreader.Close()
ElseIf flag = 0 Then
    Dim nextid As Integer
    nextid = OrderIDData.Text
    getNextRecord(1)
    If OrderIDData.Text <> 0 Then
        Dim reader1 As Data.IDataReader =
CType(OrdersSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        Dim reader2 As Data.IDataReader =
CType(CustInfoSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        Dim custidtemp As Integer
        While reader1.Read()
            If reader1("Order_ID") = OrderIDData.Text Then
                DateofOrderData.Text = reader1("Date_of_Order")
                shipdate = reader1("Date_to_be_Shipped")
                DayInput.Text = Day(shipdate)
                MonthInput.Text = Month(shipdate)
                YearInput.Text = Year(shipdate)
                custidtemp = reader1("Customer_ID")
                Exit While
            End If
        End While
        reader1.Close()
        While reader2.Read()
            If custidtemp = reader2("Customer_ID") Then
                NameDropDownList.Text = reader2("Customer_Name")
                Exit While
            End If
        End While
        reader2.Close()
    Else
        OrderIDData.Text = nextid
    End If
ElseIf flag = 1 Then
    Dim previd As Integer
    previd = OrderIDData.Text
    getPreviousRecord(1)
    If OrderIDData.Text <> 0 Then
        Dim reader1 As Data.IDataReader =
CType(OrdersSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        Dim reader2 As Data.IDataReader =
CType(CustInfoSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        Dim custidtemp As Integer
        While reader1.Read()
            If reader1("Order_ID") = OrderIDData.Text Then
                DateofOrderData.Text = reader1("Date_of_Order")
                shipdate = reader1("Date_to_be_Shipped")
                DayInput.Text = Day(shipdate)
                MonthInput.Text = Month(shipdate)
                YearInput.Text = Year(shipdate)
                custidtemp = reader1("Customer_ID")
                Exit While
            End If
        End While
        reader1.Close()
        While reader2.Read()
            If custidtemp = reader2("Customer_ID") Then

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        NameDropDownList.Text = reader2("Customer_Name")
        Exit While
    End If
End While
reader2.Close()
Else
    OrderIDData.Text = previd
End If
End If
Dim reader3 As Data.IDataReader =
CType(OrdersSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
While reader3.Read()
    If reader3("Order_ID") = OrderIDData.Text Then
        If reader3("Completed?") = True Then
            CompletedDropDownList.SelectedValue = True
        Else
            CompletedDropDownList.SelectedValue = False
        End If
        If reader3("Paid?") = True Then
            paid.Checked = True
        Else
            paid.Checked = False
        End If
        If reader3("Ready_to_be_shipped?") = True Then
            ready.Checked = True
        Else
            ready.Checked = False
        End If
    End If
End While
reader3.Close()
selectProductGridView()
End Sub

Public Sub refreshAmount()
    GridView1.DataBind()
    If GridView1.Rows.Count > 0 Then
        If ProductDropDownList.SelectedItem IsNot Nothing Then
            Dim reader1 As Data.IDataReader =
CType(GridViewDataSource2.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            Dim flag As Integer = 0
            AmountInput.Text = 0
            While reader1.Read()
                If ProductDropDownList.SelectedItem.Text = reader1("Product_Name")
Then
                    AmountInput.Text = reader1("Amount")
                    Exit While
                Else
                    AmountInput.Text = 0
                End If
            End While
            reader1.Close()
        Else
            selectProductGridView()
        End If
    Else
        AmountInput.Text = 0
    End If
End If

```

```

End Sub
Public Sub selectProductGridView()
    Dim flag As Boolean = False
    Dim reader2 As Data.IDataReader =
CType(GridViewDataSource2.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    reader2.Read()
    Dim reader1 As Data.IDataReader =
CType(ProductsofOrdersSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader1.Read()
        If OrderIDData.Text = reader1("Order_ID") Then
            ProductDropDownList.Selected.Value = reader2("Product_ID")
            flag = True
            Exit While
        End If
    End While
    reader1.Close()
    reader2.Close()
    If flag = False Then
        Dim reader3 As Data.IDataReader =
CType(ProductListSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        reader3.Read()
        ProductDropDownList.Items.FindByText(reader3("Product_Name")).Selected = True
        reader3.Close()
    End If
    refreshAmount()
End Sub
Protected Sub PreviousRecord_Click(ByVal sender As Object, ByVal e As
System.EventArgs) Handles PreviousRecord.Click
    Dim reader As Data.IDataReader =
CType(OrdersSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    Dim emptyflag As Boolean
    emptyflag = False
    While reader.Read()
        If OrderIDData.Text = reader("Order_ID") Then
            displayInformation(1)
            emptyflag = True
            Exit While
        End If
    End While
    reader.Close()
    If emptyflag = False Then
        MsgBox("Please save the new order first.")
    End If
End Sub

Protected Sub NextRecord_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles NextRecord.Click
    displayInformation(0)
End Sub

Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
    If Page.IsPostBack = False Then
        ProductDropDownList.DataBind()
    End If
    If OrderIDData.Text = "" Then
        displayInformation(-1)
    End If

```

```

GridView1.Sort("Product_ID", SortDirection.Ascending)

End Sub

Protected Sub Save_Click(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Save.Click
    If CDate(DayInput.Text & "/" & MonthInput.Text & "/" & YearInput.Text) >=
CDate(DateofOrderData.Text) Or CInt(DayInput.Text) > 31 Or CInt(DayInput.Text) < 1 Or
CInt(MonthInput.Text) > 12 Or CInt(MonthInput.Text) < 1 Or CInt(YearInput.Text) > 3000 Or
CInt(YearInput.Text) < 2023 Then
        Dim neworderflag As Integer = 0
        Dim reader5 As Data.IDataReader =
CType(OrdersSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader5.Read()
            If OrderIDData.Text = reader5("Order_ID") Then
                neworderflag = 1
                Dim presenceflag As Integer = 0
                Dim reader As Data.IDataReader =
CType(GridViewDataSource2.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
                While reader.Read()
                    If ProductDropDownList.SelectedItem.ToString =
reader("Product_Name") Then
                        ProductsofOrdersSource.Update()
                        presenceflag = 1
                        Exit While
                    End If
                End While
                reader.Close()
                If presenceflag = 0 Then
                    ProductsofOrdersSource.InsertParameters("amount").DefaultValue =
CInt(AmountInput.Text)
                    ProductsofOrdersSource.InsertParameters("productid").DefaultValue
= ProductDropDownList.SelectedValue
                    ProductsofOrdersSource.InsertParameters("orderid").DefaultValue =
CInt(OrderIDData.Text)
                    ProductsofOrdersSource.Insert()
                End If
                GridView1.DataBind()
                Dim reader4 As Data.IDataReader =
CType(CustInfoSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
                While reader4.Read()
                    If NameDropDownList.SelectedValue = reader4("Customer_Name") Then
                        OrdersSource.UpdateParameters("custid").DefaultValue =
reader4("Customer_ID")
                        OrdersSource.UpdateParameters("shipdate").DefaultValue =
CDate(DayInput.Text & "/" & MonthInput.Text & "/" & YearInput.Text)
                        If CompletedDropDownList.SelectedValue = True Then
                            OrdersSource.UpdateParameters("completed").DefaultValue =
True
                        Else
                            OrdersSource.UpdateParameters("completed").DefaultValue =
False
                        End If
                        If paid.Checked = True Then
                            OrdersSource.UpdateParameters("paid").DefaultValue = True
                        Else
                            OrdersSource.UpdateParameters("paid").DefaultValue =
False
                        End If
                    End If
                End While
            End If
        End While
    End If

```

```

        End If
        If ready.Checked = True Then
            OrdersSource.UpdateParameters("ready").DefaultValue =
True
        Else
            OrdersSource.UpdateParameters("ready").DefaultValue =
False
        End If
        OrdersSource.Update()
        MsgBox("Changes successfully saved.")
    End If
End While
reader4.Close()
End If
End While
reader5.Close()
If neworderflag = 0 Then
    If AmountInput.Text > 0 Then
        OrdersSource.InsertParameters("orderid").DefaultValue =
OrderIDData.Text
        OrdersSource.InsertParameters("orderdate").DefaultValue = Today
        OrdersSource.InsertParameters("shipdate").DefaultValue =
CDate(DayInput.Text & "/" & MonthInput.Text & "/" & YearInput.Text)
        Dim reader6 As Data.IDataReader =
CType(CustInfoSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader6.Read()
            If NameDropDownList.SelectedValue = reader6("Customer_Name") Then
                OrdersSource.InsertParameters("custid").DefaultValue =
reader6("Customer_ID")
            End If
        End While
        reader6.Close()
        If CompletedDropDownList.SelectedValue = True Then
            OrdersSource.InsertParameters("completed").DefaultValue = True
        Else
            OrdersSource.InsertParameters("completed").DefaultValue = False
        End If
        If paid.Checked = True Then
            OrdersSource.InsertParameters("paid").DefaultValue = True
        Else
            OrdersSource.InsertParameters("paid").DefaultValue = False
        End If
        If ready.Checked = True Then
            OrdersSource.InsertParameters("ready").DefaultValue = True
        Else
            OrdersSource.InsertParameters("ready").DefaultValue = False
        End If
        OrdersSource.Insert()
        ProductsofOrdersSource.InsertParameters("amount").DefaultValue =
CInt(AmountInput.Text)
        ProductsofOrdersSource.InsertParameters("productid").DefaultValue =
ProductDropDownList.SelectedValue
        ProductsofOrdersSource.InsertParameters("orderid").DefaultValue =
CInt(OrderIDData.Text)
        ProductsofOrdersSource.Insert()
        MsgBox("New order successfully added.")
    End If

```



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        End If
    Else
        MsgBox("Date to be Shipped is invalid.")
    End If

    ProductDropDownList.DataBind()
    ProductDeleteDropDownList.DataBind()
    GridViewDataSource2.DataBind()
    selectProductGridView()
    showAll()
End Sub

Protected Sub ProductDropDownList_TextChanged(ByVal sender As Object, ByVal e As
System.EventArgs) Handles ProductDropDownList.TextChanged
    refreshAmount()
End Sub
Protected Sub NewOrder_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles NewOrder.Click
    Dim reader As Data.IDataReader =
CType(OrdersSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        OrderIDData.Text = reader("Order_ID") + 1
        AmountInput.Text = 0
        CompletedDropDownList.SelectedValue = False
        paid.Checked = False
        ready.Checked = False
        ProductDropDownList.SelectedIndex = 0
        NameDropDownList.SelectedIndex = 0
        DateofOrderData.Text = Today
        DayInput.Text = Day(Today)
        MonthInput.Text = Month(Today)
        YearInput.Text = Year(Today)
    End While
    reader.Close()
    refreshAmount()
    DeleteProductLabel.Visible = False
    ProductDeleteDropDownList.Visible = False
    SearchProductDelete.Visible = False
    DeleteProduct.Visible = False
    DeleteOrder.Visible = False
    NewOrder.Visible = False
    CancelButton.Visible = True
End Sub

Protected Sub DeleteOrder_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles DeleteOrder.Click
    Dim ans As String
    Dim id As Integer
    ans = MsgBox("Are you sure you want to delete this order?", MsgBoxStyle.YesNo)
    If ans = MsgBoxResult.Yes Then
        id = OrderIDData.Text
        OrdersSource.DeleteParameters("orderid").DefaultValue = id
        OrdersSource.Delete()
        ProductsofOrdersSource.DeleteParameters("orderid").DefaultValue = id
        ProductsofOrdersSource.Delete()
        MsgBox("Order successfully deleted.")
        displayInformation(-1)
    End If

```

```

End Sub

Protected Sub SearchName_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles SearchName.Click
    Dim ans As String
    Dim flag As Boolean = False
    ans = InputBox("Enter ID")
    If ans <> "" Then
        Dim reader As Data.IDataReader =
CType(CustInfoSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            If reader("Customer_ID") = ans Then
                NameDropDownList.Text = reader("Customer_Name")
                flag = True
                Exit While
            End If
        End While
        reader.Close()
        If flag = False Then
            MsgBox("ID not found.", MsgBoxStyle.Exclamation)
        End If
    End If
End Sub

Protected Sub SearchProduct_Click(ByVal sender As Object, ByVal e As
System.EventArgs) Handles SearchProduct.Click
    Dim ans As String
    Dim flag As Boolean = False
    ans = InputBox("Enter ID")
    If ans <> "" Then
        Dim reader As Data.IDataReader =
CType(ProductListSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            If reader("Product_ID") = ans Then
                ProductDropDownList.SelectedValue = reader("Product_ID")
                flag = True
                Exit While
            End If
        End While
        reader.Close()
        If flag = False Then
            MsgBox("ID not found.", MsgBoxStyle.Exclamation)
        End If
        refreshAmount()
    End If
End Sub

Protected Sub SearchOrder_Click(sender As Object, e As EventArgs) Handles
SearchOrder.Click
    Dim temp As Integer
    Dim ans As String
    Dim flag As Boolean = False
    ans = InputBox("Enter ID")
    If ans <> "" Then
        Dim reader As Data.IDataReader =
CType(OrdersSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Order_ID")
            If temp = ans Then

```

```

        OrderIDData.Text = temp + 1
        displayInformation(1)
        OrderIDData.Text = temp
        flag = True
        Exit While
    End If
End While
reader.Close()
If flag = False Then
    MsgBox("ID not found.", MsgBoxStyle.Exclamation)
End If
End If
End Sub

Protected Sub DeleteProduct_Click(sender As Object, e As EventArgs) Handles
DeleteProduct.Click
    If ProductDeleteDropDownList.SelectedItem IsNot Nothing Then
        Dim ans As String
        ans = MsgBox("Are you sure you want to delete the product: " &
ProductDeleteDropDownList.SelectedItem.ToString & " from the order?"), MsgBoxStyle.YesNo)
        If ans = MsgBoxResult.Yes Then
            GridViewDataSource2.DeleteParameters("orderid").DefaultValue =
OrderIDData.Text
            GridViewDataSource2.DeleteParameters("productid").DefaultValue =
ProductDeleteDropDownList.SelectedValue
            GridViewDataSource2.Delete()
            refreshAmount()
            MsgBox("Product successfully deleted from the order.")
            selectProductGridView()
        End If
    Else
        MsgBox("Please select the product to be deleted from the order.",
MsgBoxStyle.Exclamation)
    End If
End Sub

Protected Sub SearchProductDelete_Click(sender As Object, e As EventArgs) Handles
SearchProductDelete.Click
    Dim ans As String
    Dim flag As Boolean = False
    ans = InputBox("Enter ID")
    If ans <> "" Then
        Dim reader As Data.IDataReader =
CType(GridViewDataSource2.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            If reader("Product_ID") = ans Then
                ProductDeleteDropDownList.SelectedValue = reader("Product_ID")
                flag = True
                Exit While
            End If
        End While
        reader.Close()
        If flag = False Then
            MsgBox("Product not found.", MsgBoxStyle.Exclamation)
        End If
    Else
        MsgBox("ID has not been entered, please try again", MsgBoxStyle.Exclamation)
    End If
End Sub

```

```

Public Sub hideAll()
    OrderIDLabel.Visible = False
    OrderIDData.Visible = False
    SearchOrder.Visible = False
    DateofOrderLabel.Visible = False
    DateofOrderData.Visible = False
    DatetobeShippedLabel.Visible = False
    DayInput.Visible = False
    MonthInput.Visible = False
    YearInput.Visible = False
    divider1.Visible = False
    divider2.Visible = False
    CustomerNameLabel.Visible = False
    NameDropDownList.Visible = False
    SearchName.Visible = False
    ProductDropDownList.Visible = False
    AmountInput.Visible = False
    SearchProduct.Visible = False
    GridView1.Visible = False
    ready.Visible = False
    paid.Visible = False
    StatusLabel.Visible = False
    CompletedDropDownList.Visible = False
    DeleteOrder.Visible = False
    DeleteProductLabel.Visible = False
    ProductDeleteDropDownList.Visible = False
    SearchProductDelete.Visible = False
    DeleteProduct.Visible = False
End Sub
Public Sub showAll()
    OrderIDLabel.Visible = True
    OrderIDData.Visible = True
    SearchOrder.Visible = True
    DateofOrderLabel.Visible = True
    DateofOrderData.Visible = True
    DatetobeShippedLabel.Visible = True
    DayInput.Visible = True
    MonthInput.Visible = True
    YearInput.Visible = True
    divider1.Visible = True
    divider2.Visible = True
    CustomerNameLabel.Visible = True
    NameDropDownList.Visible = True
    SearchName.Visible = True
    ProductDropDownList.Visible = True
    AmountInput.Visible = True
    SearchProduct.Visible = True
    GridView1.Visible = True
    ready.Visible = True
    paid.Visible = True
    StatusLabel.Visible = True
    CompletedDropDownList.Visible = True
    DeleteOrder.Visible = True
    DeleteProductLabel.Visible = True
    ProductDeleteDropDownList.Visible = True
    SearchProductDelete.Visible = True
    DeleteProduct.Visible = True
    NewOrder.Visible = True

```

```

        CancelButton.Visible = False
    End Sub

    Protected Sub CancelButton_Click(sender As Object, e As EventArgs) Handles
CancelButton.Click
        displayInformation(-1)
        CancelButton.Visible = False
        showAll()
    End Sub
    Public Function getMaxID() As Integer
        Dim maxid, temp As Integer
        maxid = 0
        Dim reader As Data.IDataReader =
CType(OrdersSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Order_ID")
            If maxid < temp Then
                maxid = temp
            End If
        End While
        reader.Close()
        Return maxid
    End Function
    Public Function getMinID() As Integer
        Dim minid, temp As Integer
        minid = 999999999
        Dim reader As Data.IDataReader =
CType(OrdersSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Order_ID")
            If minid > temp Then
                minid = temp
            End If
        End While
        reader.Close()
        Return minid
    End Function
    Public Sub getNextRecord(ByVal count As Integer)
        Dim nextflag As Boolean = False
        Dim tempid As Integer
        While Val(CInt(OrderIDData.Text) + count) <= getMaxID() And nextflag = False
            Dim reader As Data.IDataReader =
CType(OrdersSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            While reader.Read()
                tempid = reader("Order_ID")
                If Val(CInt(OrderIDData.Text) + count) = tempid Then
                    nextflag = True
                    OrderIDData.Text = tempid
                    Exit While
                End If
            End While
            reader.Close()
            If nextflag = False Then
                nextflag = True
                getNextRecord(count + 1)
            Else
                Exit While
            End If
        End While
    End Sub

```

```

        End While
        If nextflag = False Then
            OrderIDData.Text = 0
        End If
    End Sub
    Public Sub getPreviousRecord(ByVal count As Integer)
        Dim prevflag As Boolean = False
        Dim tempid As Integer
        While Val(CInt(OrderIDData.Text) - count) >= getMinID() And prevflag = False
            Dim reader As Data.IDataReader =
CType(OrdersSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            While reader.Read()
                tempid = reader("Order_ID")
                If Val(CInt(OrderIDData.Text) - count) = tempid Then
                    prevflag = True
                    OrderIDData.Text = tempid
                    Exit While
                End If
            End While
            reader.Close()
            If prevflag = False Then
                prevflag = True
                getPreviousRecord(count + 1)
            Else
                Exit While
            End If
        End While
        If prevflag = False Then
            OrderIDData.Text = 0
        End If
    End Sub
End Class

```

3.3 ASPX Code

```

<%@ Page Language="VB" AutoEventWireup="true" CodeFile="Edit_Orders.aspx.vb"
Inherits="Edit_Orders" %>

<%@ Register assembly="AjaxControlToolkit" namespace="AjaxControlToolkit"
tagprefix="ajaxToolkit" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
    <title>Edit Orders</title>
    <link rel="stylesheet" href="ia.css" />
</head>
<body>
    <form id="Edit_Orders" runat="server">

        <table style="margin:auto; width:45%; margin-top:10%; text-align:left">
        <tr>
            <td align="left" colspan="2">
                <asp:Label ID="OrderIDLabel" runat="server" Text="Order ID:">
                </asp:Label>

```

```

        <asp:Label ID="OrderIDData" runat="server">
        </asp:Label>
        &nbsp;
        <asp:Button ID="SearchOrder" runat="server" Text="Search by ID" />
    </td>
    <td rowspan="4" align="right">
        <asp:Button ID="Save" runat="server" Text="Save" width="100px"/>
        <br />
        <br />
        <asp:Button ID="NewOrder" runat="server" Text="New Order"
width="100px"/>
        <br />
        <br />
        <asp:Button ID="DeleteOrder" runat="server" Text="Delete Order"
width="100px"/>
        <asp:Button ID="CancelButton" runat="server" Text="Cancel"
Visible="False" width="100px"/>
    </td>
</tr>
<tr>
<td>
    <asp:Label ID="DateofOrderLabel" runat="server" Text="Date of Order:">
    </asp:Label>
    <asp:Label ID="DateofOrderData" runat="server">
    </asp:Label>
</td>
    </tr>
<tr>
<td colspan="2">
    <asp:Label ID="DatetobeShippedLabel" runat="server" Text="Date to be Shipped:">
    </asp:Label>
    <div style="font-size:24px;display:inline;">
    <asp:TextBox ID="DayInput" runat="server" MaxLength="2" Width="40px"
style="display: inline;"></asp:TextBox>
    <ajaxToolkit:NumericUpDownExtender ID="DayInput_NumericUpDownExtender"
runat="server" BehaviorID="DayInput_NumericUpDownExtender" Maximum="31" Minimum="1"
RefValues="" Step="1" ServiceDownPath="" Tag="" TargetButtonDownID=""
TargetButtonUpID="" TargetControlID="DayInput" Width="40"/>
    <asp:Label ID="divider1" runat="server" Text="/"></asp:Label>
    <asp:TextBox ID="MonthInput" runat="server" MaxLength="2" Width="40px"
style="display: inline;"></asp:TextBox>
    <ajaxToolkit:NumericUpDownExtender ID="MonthInput_NumericUpDownExtender"
runat="server" BehaviorID="MonthInput_NumericUpDownExtender" Maximum="12"
Minimum="1" RefValues="" Step="1" ServiceDownPath="" Tag="" TargetButtonDownID=""
TargetButtonUpID="" TargetControlID="MonthInput" Width="40" />
    <asp:Label ID="divider2" runat="server" Text="/"></asp:Label>
    <asp:TextBox ID="YearInput" runat="server" MaxLength="4" Width="70px"
style="display: inline;"></asp:TextBox>
    <ajaxToolkit:NumericUpDownExtender ID="YearInput_NumericUpDownExtender"
runat="server" BehaviorID="YearInput_NumericUpDownExtender" Maximum="3000"
Minimum="2023" RefValues="" Step="1" ServiceDownPath="" Tag=""
TargetButtonDownID="" TargetButtonUpID="" TargetControlID="YearInput" Width="70" />
    </div>
    </td>
</tr>
<tr>
    <td align="left" colspan="2">

```

```

        <asp:Label ID="CustomerNameLabel" runat="server" Text="Name:">
        </asp:Label>

        <ajaxToolkit:ComboBox ID="NameDropDownList" runat="server"
AutoCompleteMode="SuggestAppend" DataSourceID="CustInfoSource"
DataTextField="Customer_Name" DataValueField="Customer_Name"
DropDownStyle="DropDownList" style="display: inline;" Width="60px">
        </ajaxToolkit:ComboBox>
        &nbsp;
        <asp:Button ID="SearchName" runat="server" Text="Search by ID" />
    </td>
</tr>
<tr>
    <td colspan="2">
        &nbsp;
        <ajaxToolkit:ComboBox ID="ProductDropDownList" runat="server"
AutoCompleteMode="SuggestAppend" AutoPostBack="True"
DataSourceID="ProductListSource" DataTextField="Product_Name"
DataValueField="Product_ID" DropDownStyle="DropDownList" MaxLength="0"
style="display: inline;" Width="60px">
        </ajaxToolkit:ComboBox>
        &nbsp;
        <asp:TextBox ID="AmountInput" runat="server" Width="40px" Wrap="False"
EnableTheming="True"></asp:TextBox>
        <ajaxToolkit:NumericUpDownExtender
ID="AmountInput_NumericUpDownExtender" runat="server"
BehaviorID="AmountInput_NumericUpDownExtender" Maximum="1.7976931348623157E+308"
Minimum="0" RefValues="" Step="1" ServiceDownPath="" Tag="" TargetButtonDownID=""
TargetButtonUpID="" TargetControlID="AmountInput" Width="40"/>
        <asp:Button ID="SearchProduct" runat="server" Text="Search by ID" />
    </td>
    <td align="left" rowspan="3">
        <asp:Label ID="DeleteProductLabel" runat="server" Text="Product to be
Deleted:"></asp:Label>
        <br />
        <ajaxToolkit:ComboBox ID="ProductDeleteDropDownList" runat="server"
AutoCompleteMode="SuggestAppend"
AutoPostBack="True"
DataSourceID="GridViewDataSource1" DataTextField="Product_Name"
DataValueField="Product_ID"
DropDownStyle="DropDownList" MaxLength="0" style="display: inline;" Width="60px">
        </ajaxToolkit:ComboBox>
        &nbsp;
        <asp:Button ID="SearchProductDelete" runat="server" Text="Search by ID"
style="height: 26px" />
        <br />
        <br />
        <asp:Button ID="DeleteProduct" runat="server" Text="Delete Product"/>
    </td>
</tr>
<tr>
<td>
&nbsp;
</td>
</tr>
<tr>
    <td style="text-align:center">

```



```

        <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False"
DataSourceID="GridViewDataSource1" EnableSortingAndPagingCallbacks="True"
HorizontalAlign="Left">
            <Columns>
                <asp:BoundField DataField="Product_Name"
HeaderText="Product_Name" SortExpression="Product_Name" />
                <asp:BoundField DataField="Amount" HeaderText="Amount"
SortExpression="Amount" />
            </Columns>
        </asp:GridView>
    </td>
    <td align="left">
        <asp:CheckBox ID="ready" runat="server" AutoPostBack="True" Text="Ready
to be shipped?" />
        <br />
        <br />
        <asp:CheckBox ID="paid" runat="server" AutoPostBack="True" Text="Paid?"
/>
        <br />
        <br />
        <br />
        <asp:Label ID="StatusLabel" runat="server" Text="Status:" Font-
Size="Large"></asp:Label>
        <asp:DropDownList ID="CompletedDropDownList" runat="server"
AutoPostBack="True">
            <asp:ListItem Value="True">Completed</asp:ListItem>
            <asp:ListItem Selected="True" Value="False">Ongoing</asp:ListItem>
        </asp:DropDownList>
    </td>
</tr>
</tr>
<tr>
<td>
    &nbsp;
</td>
</tr>
<tr>
    <td align="left" colspan="2">
        <asp:Button ID="PreviousRecord" runat="server" Text="Previous" />
        &nbsp; &nbsp; &nbsp; &nbsp;
        <asp:Button ID="NextRecord" runat="server" Text="Next" />
    </td>
    <td align="right">
        <asp:Button ID="Home" runat="server" Text="Back to Home"
PostBackUrl="~/home.aspx" />
    </td>
</tr>
</table>
<div>
<asp:ScriptManager ID="ScriptManager1" runat="server" EnablePageMethods="true">
    </asp:ScriptManager>
    <asp:AccessDataSource ID="LinkedLoadDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT Orders.Order_ID,
Customer_Information.Customer_Name, Orders.[Completed?], Orders.[Paid?],
Orders.[Ready_to_be_shipped?], Customer_Information.Customer_ID,
Orders.Date_of_Order, Orders.Date_to_be_Shipped FROM (Orders INNER JOIN
Customer_Information ON Orders.Customer_ID = Customer_Information.Customer_ID)">
    </asp:AccessDataSource>

```

```

        <asp:AccessDataSource ID="GridViewDataSource2" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
        SelectCommand="SELECT Product_List.[Product_Name],
Products_of_Orders.[Amount], Products_of_Orders.[Product_ID] FROM (Product_List
INNER JOIN Products_of_Orders ON Product_List.[Product_ID] =
Products_of_Orders.[Product_ID]) WHERE (Products_of_Orders.[Order_ID] = @orderid)
ORDER BY Product_List.[Product_ID]"
        DeleteCommand="DELETE FROM Products_of_Orders WHERE (Order_ID = @orderid
AND Product_ID = @productid)">
        <SelectParameters>
            <asp:controlparameter name="@orderid" controlid="OrderIDData"
propertyname="Text"/>
        </SelectParameters>
        <DeleteParameters>
            <asp:parameter name="orderid" defaultvalue=""/>
            <asp:parameter name="productid" defaultvalue=""/>
        </DeleteParameters>
        </asp:AccessDataSource>
        <asp:AccessDataSource ID="GridViewDataSource1" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb"
        SelectCommand="SELECT Product_List.[Product_Name],
Products_of_Orders.[Amount], Products_of_Orders.[Product_ID] FROM (Product_List
INNER JOIN Products_of_Orders ON Product_List.[Product_ID] =
Products_of_Orders.[Product_ID]) WHERE (Products_of_Orders.[Order_ID] = @orderid)
ORDER BY Product_List.[Product_ID]">
        <SelectParameters>
            <asp:controlparameter name="@orderid" controlid="OrderIDData"
propertyname="Text"/>
        </SelectParameters>
        </asp:AccessDataSource>
        <asp:AccessDataSource ID="CustInfoSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
        SelectCommand="SELECT * FROM [Customer_Information] ORDER BY
[Customer_ID]">
        </asp:AccessDataSource>
        <asp:AccessDataSource ID="ValidationSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
        SelectCommand="SELECT [Order_ID] FROM [Orders]">
        </asp:AccessDataSource>
        <asp:AccessDataSource ID="ProductListSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
        SelectCommand="SELECT * FROM [Product_List] ORDER BY Product_ID">
        </asp:AccessDataSource>
        <asp:AccessDataSource ID="OrdersSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
        SelectCommand="SELECT * FROM [Orders]"
        UpdateCommand="UPDATE Orders SET Orders.Customer_ID = @custid,
Orders.[Completed?] = @completed, Orders.[Paid?] = @paid,
Orders.[Ready_to_be_shipped?] = @ready, Orders.[Date_to_be_Shipped] = @shipdate
WHERE (Orders.Order_ID = @orderid)"
        InsertCommand="INSERT INTO Orders(Order_ID, Customer_ID, [Completed?],
[Paid?], [Ready_to_be_shipped?], [Date_of_Order], [Date_to_be_Shipped]) VALUES
(@orderid, @custid, @completed, @paid, @ready, @orderdate, @shipdate)"
        DeleteCommand="DELETE FROM Orders WHERE (Orders.Order_ID = @orderid)">
        <UpdateParameters>
            <asp:parameter name="custid" defaultvalue=""/>
            <asp:parameter name="completed" defaultvalue=""
DbType="Boolean"/>

```

```

        <asp:parameter name="paid" defaultvalue="" DbType="Boolean"/>
        <asp:parameter name="ready" defaultvalue="" DbType="Boolean"/>
        <asp:parameter name="shipdate" defaultvalue="" DbType="Date"/>
        <asp:controlparameter name="@orderid" controlid="OrderIDData"
propertyname="Text"/>
    </UpdateParameters>
    <InsertParameters>
        <asp:parameter name="orderid" defaultvalue=""/>
        <asp:parameter name="custid" defaultvalue=""/>
        <asp:parameter name="completed" defaultvalue=""
DbType="Boolean"/>
        <asp:parameter name="paid" defaultvalue="" DbType="Boolean"/>
        <asp:parameter name="ready" defaultvalue="" DbType="Boolean"/>
        <asp:parameter name="orderdate" defaultvalue=""
DbType="Date"/>
        <asp:parameter name="shipdate" defaultvalue="" DbType="Date"/>
    </InsertParameters>
    <DeleteParameters>
        <asp:parameter name="orderid" defaultvalue=""/>
    </DeleteParameters>
</asp:AccessDataSource>
    <asp:AccessDataSource ID="ProductsofOrdersSource"
runat="server" DataFile="~/App_Data/Computer Science IA.mdb"
DataSourceMode="DataReader"
    SelectCommand="SELECT * FROM [Products_of_Orders]"
    DeleteCommand="DELETE FROM Products_of_Orders WHERE
(ProductsofOrders.Order_ID = @orderid)"
    InsertCommand="INSERT INTO Products_of_Orders (Product_ID, Amount,
Order_ID) VALUES (@productid, @amount, @orderid)"
    UpdateCommand="UPDATE Products_of_Orders SET Amount = @amount WHERE
(Product_ID = @productid AND Order_ID = @orderid)">
        <DeleteParameters>
            <asp:parameter name="orderid" defaultvalue=""/>
        </DeleteParameters>
        <InsertParameters>
            <asp:parameter name="productid" defaultvalue=""/>
            <asp:parameter name="amount" defaultvalue=""/>
            <asp:parameter name="orderid" defaultvalue=""/>
        </InsertParameters>
        <UpdateParameters>
            <asp:controlparameter name="@amount" controlid="AmountInput"
propertyname="Text" DbType="Int16"/>
            <asp:controlparameter name="@productid"
controlid="ProductDropDownList" propertyname="SelectedValue"/>
            <asp:controlparameter name="@orderid" controlid="OrderIDData"
propertyname="Text"/>
        </UpdateParameters>
    </asp:AccessDataSource>
    <asp:AccessDataSource ID="AccessDataSource1" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb"
DataSourceMode="DataReader" SelectCommand="SELECT * FROM
[Test]"></asp:AccessDataSource>
</div>
</form>
</body>
</html>

```

4. View Orders Page

4.1 Page Design

Order ID: 1

Name: Customer_Name

Date of Order: 15/01/2023

Date to be Shipped: 22/03/2023

Total Price: Rp. 50000

Filter:

☐ Ready to be shipped? ☐ Sort by Date?

☐ Paid?

Status:

Customer Name:

Product_Name	Amount
Product_Name	1

Status: Completed

Paid?: Yes

Ready to be shipped?: Yes

4.2 Visual Basic Code

```
Partial Class View_Orders
    Inherits System.Web.UI.Page
    Public Sub displayInformation(ByVal flag As Integer, ByVal filtercount As Integer)
        Dim totprice As Double
        Dim filterflag As Boolean
        Dim tempid As Integer
        filterflag = True
        If SortByDate.Checked = False Then
            If flag = -1 Then
                Dim linkedreader As Data.IDataReader =
CType(LoadDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
                While linkedreader.Read()
                    tempid = linkedreader("Order_ID")
                    If tempid = getMaxID() Then
                        OrderIDData.Text = tempid
                        CustomerNameData.Text = linkedreader("Customer_Name")
                        DateofOrderData.Text = linkedreader("Date_of_Order")
                        DatetobeShippedData.Text = linkedreader("Date_to_be_Shipped")
                    Exit While
                End If
            End While
            linkedreader.Close()
        ElseIf flag = 0 Then
            Dim nextid As Integer
```

```

nextid = OrderIDData.Text
getNextRecord(1)
If OrderIDData.Text <> 0 Then
    Dim reader1 As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    Dim reader2 As Data.IDataReader =
CType(CustInfoSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    Dim custidtemp As Integer
    While reader1.Read()
        If reader1("Order_ID") = OrderIDData.Text Then
            DateofOrderData.Text = reader1("Date_of_Order")
            DatetobeShippedData.Text = reader1("Date_to_be_Shipped")
            custidtemp = reader1("Customer_ID")
            Exit While
        End If
    End While
    reader1.Close()
    While reader2.Read()
        If custidtemp = reader2("Customer_ID") Then
            CustomerNameData.Text = reader2("Customer_Name")
            Exit While
        End If
    End While
    reader2.Close()
Else
    OrderIDData.Text = nextid
    flag = 1
End If
ElseIf flag = 1 Then
    Dim previd As Integer
    previd = OrderIDData.Text
    getPreviousRecord(1)
    If OrderIDData.Text <> 0 Then
        Dim reader1 As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        Dim reader2 As Data.IDataReader =
CType(CustInfoSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        Dim custidtemp As Integer
        While reader1.Read()
            If reader1("Order_ID") = OrderIDData.Text Then
                DateofOrderData.Text = reader1("Date_of_Order")
                DatetobeShippedData.Text = reader1("Date_to_be_Shipped")
                custidtemp = reader1("Customer_ID")
                Exit While
            End If
        End While
        reader1.Close()
        While reader2.Read()
            If custidtemp = reader2("Customer_ID") Then
                CustomerNameData.Text = reader2("Customer_Name")
                Exit While
            End If
        End While
        reader2.Close()
    Else
        OrderIDData.Text = previd
        flag = 0
    End If

```

```

        End If
    Else
        If flag = -1 Then
            Dim linkedreader As Data.IDataReader =
CType(LinkedLoadDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            While linkedreader.Read()
                tempid = linkedreader("Order_ID")
                If tempid = getSortArray()(0) Then
                    OrderIDData.Text = tempid
                    CustomerNameData.Text = linkedreader("Customer_Name")
                    DateofOrderData.Text = linkedreader("Date_of_Order")
                    DatetobeShippedData.Text = linkedreader("Date_to_be_Shipped")
                Exit While
            End If
        End While
        linkedreader.Close()
    Else
        If flag = 1 Then
            Dim nextindex As Integer
            For i = 0 To getRecordCount() - 1
                If getSortArray()(i) = OrderIDData.Text Then
                    nextindex = i
                Exit For
            End If
        Next
        If nextindex - 1 >= 0 Then
            OrderIDData.Text = getSortArray()(nextindex - 1)
            Dim reader1 As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            Dim reader2 As Data.IDataReader =
CType(CustInfoSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            Dim custidtemp As Integer
            While reader1.Read()
                If reader1("Order_ID") = OrderIDData.Text Then
                    DateofOrderData.Text = reader1("Date_of_Order")
                    DatetobeShippedData.Text = reader1("Date_to_be_Shipped")
                    custidtemp = reader1("Customer_ID")
                Exit While
            End If
        End While
        reader1.Close()
        While reader2.Read()
            If custidtemp = reader2("Customer_ID") Then
                CustomerNameData.Text = reader2("Customer_Name")
            Exit While
        End If
        End While
        reader2.Close()
    Else
        OrderIDData.Text = getSortArray()(nextindex)
        flag = -1
    End If
Else
    If flag = 0 Then
        Dim previndex As Integer
        For i = 0 To getRecordCount() - 1
            If getSortArray()(i) = OrderIDData.Text Then
                previndex = i

```

```

        Exit For
    End If
Next
If previndex + 1 <= getRecordCount() - 1 Then
    OrderIDData.Text = getSortArray()(previndex + 1)
    Dim reader1 As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    Dim reader2 As Data.IDataReader =
CType(CustInfoSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    Dim custidtemp As Integer
    While reader1.Read()
        If reader1("Order_ID") = OrderIDData.Text Then
            DateofOrderData.Text = reader1("Date_of_Order")
            DatetobeShippedData.Text =
reader1("Date_to_be_Shipped")
            custidtemp = reader1("Customer_ID")
            Exit While
        End If
    End While
    reader1.Close()
    While reader2.Read()
        If custidtemp = reader2("Customer_ID") Then
            CustomerNameData.Text = reader2("Customer_Name")
            Exit While
        End If
    End While
Else
    OrderIDData.Text = getSortArray()(previndex)
    flag = 1
End If
End If
End If
End If
Dim reader3 As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
While reader3.Read()
    If reader3("Order_ID") = OrderIDData.Text Then
        If reader3("Completed?") = True Then
            CompletedData.Text = "Completed"
        Else
            CompletedData.Text = "Ongoing"
        End If
        If reader3("Paid?") = True Then
            PaidData.Text = "Yes"
        Else
            PaidData.Text = "No"
        End If
        If reader3("Ready_to_be_shipped?") = True Then
            ReadyData.Text = "Yes"
        Else
            ReadyData.Text = "No"
        End If
    End If
End While
reader3.Close()
Dim reader4 As Data.IDataReader =
CType(TotalPriceSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)

```

```

While reader4.Read()
    totprice = (reader4("Amount") * reader4("Price")) + totprice
End While
reader4.Close()
TotalPriceData.Text = totprice
If CompletedDropDownList.SelectedItem.ToString IsNot "" Then
    If (CompletedDropDownList.SelectedValue = True And CompletedData.Text =
"Ongoing") Or (CompletedDropDownList.SelectedValue = False And CompletedData.Text =
"Completed") Then
        filterflag = False
    End If
End If
If paidfilter.Checked = True And PaidData.Text = "No" Then
    filterflag = False
End If
If readyfilter.Checked = True And ReadyData.Text = "No" Then
    filterflag = False
End If
If NameFilterDropDownList.SelectedIndex <> -1 Then
    If NameFilterDropDownList.SelectedItem.ToString IsNot "" Then
        If CStr(NameFilterDropDownList.Text) <> CStr(CustomerNameData.Text) Then
            filterflag = False
        End If
    End If
End If
If filtercount <= getRecordCount() Then
    If filterflag = False Then
        filtercount = filtercount + 1
        If flag = -1 Then
            displayInformation(1, filtercount)
        Else
            displayInformation(flag, filtercount)
        End If
    End If
Else
    MsgBox("No orders found.", MsgBoxStyle.Exclamation)
    readyfilter.Checked = False
    paidfilter.Checked = False
    CompletedDropDownList.Text = ""
    NameFilterDropDownList.Text = Nothing
    displayInformation(-1, 0)
End If
End Sub
Public Function getSortArray() As Integer()
    Dim id(getRecordCount() - 1), count, min As Integer
    Dim shipdate(getRecordCount() - 1) As Date
    count = 0
    Dim reader As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        id(count) = reader("Order_ID")
        shipdate(count) = reader("Date_to_be_Shipped")
        count = count + 1
    End While
    reader.Close()
    For i = 0 To getRecordCount() - 2
        min = i
    
```



```

        For j = i + 1 To getRecordCount() - 1
            If shipdate(j) < shipdate(min) Then
                min = j
            End If
        Next
        Dim tempid As Integer = id(min)
        Dim tempdate As Date = shipdate(min)
        id(min) = id(i)
        id(i) = tempid
        shipdate(min) = shipdate(i)
        shipdate(i) = tempdate
    Next
    Return id
End Function
Protected Sub previousbutton_Click(ByVal sender As Object, ByVal e As
System.EventArgs) Handles previousbutton.Click
    displayInformation(1, -99999)
End Sub

Protected Sub nextbutton_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles nextbutton.Click
    displayInformation(0, -99999)
End Sub

Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
    If OrderIDData.Text = "" Then
        displayInformation(-1, 0)
    End If
End Sub
Protected Sub paidfilter_CheckedChanged(ByVal sender As Object, ByVal e As
System.EventArgs) Handles paidfilter.CheckedChanged
    displayInformation(-1, 0)
End Sub

Protected Sub readyfilter_CheckedChanged(ByVal sender As Object, ByVal e As
System.EventArgs) Handles readyfilter.CheckedChanged
    displayInformation(-1, 0)
End Sub
Protected Sub CompletedDropDownList_SelectedIndexChanged(sender As Object, e As
EventArgs) Handles CompletedDropDownList.SelectedIndexChanged
    displayInformation(-1, 0)
End Sub
Protected Sub NameFilterDropDownList_SelectedIndexChanged(sender As Object, e As
EventArgs) Handles NameFilterDropDownList.SelectedIndexChanged
    displayInformation(-1, 0)
End Sub
Public Function getRecordCount() As Integer
    Dim count As Integer
    Dim countreader As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While countreader.Read()
        count = count + 1
    End While
    countreader.Close()
    Return count
End Function

```

```

Protected Sub ClearButton_Click(sender As Object, e As EventArgs) Handles
ClearButton.Click
    NameFilterDropDownList.SelectedIndex = -1
    displayInformation(-1, 0)
End Sub
Public Function getMaxID() As Integer
    Dim maxid, temp As Integer
    maxid = 0
    Dim reader As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        temp = reader("Order_ID")
        If maxid < temp Then
            maxid = temp
        End If
    End While
    reader.Close()
    Return maxid
End Function
Public Function getMinID() As Integer
    Dim minid, temp As Integer
    minid = 999999999
    Dim reader As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        temp = reader("Order_ID")
        If minid > temp Then
            minid = temp
        End If
    End While
    reader.Close()
    Return minid
End Function
Public Sub getNextRecord(ByVal count As Integer)
    Dim nextflag As Boolean = False
    Dim tempid As Integer
    While Val(CInt(OrderIDData.Text) + count) <= getMaxID() And nextflag = False
        Dim reader As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            tempid = reader("Order_ID")
            If Val(CInt(OrderIDData.Text) + count) = tempid Then
                nextflag = True
                OrderIDData.Text = tempid
                Exit While
            End If
        End While
        reader.Close()
        If nextflag = False Then
            nextflag = True
            getNextRecord(count + 1)
        Else
            Exit While
        End If
    End While
    If nextflag = False Then
        OrderIDData.Text = 0
    End If
End Sub

```

```

End Sub
Public Sub getPreviousRecord(ByVal count As Integer)
    Dim prevflag As Boolean = False
    Dim tempid As Integer
    While Val(CInt(OrderIDData.Text) - count) >= getMinID() And prevflag = False
        Dim reader As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            tempid = reader("Order_ID")
            If Val(CInt(orderiddata.Text) - count) = tempid Then
                prevflag = True
                orderiddata.Text = tempid
                Exit While
            End If
        End While
        reader.Close()
        If prevflag = False Then
            prevflag = True
            getPreviousRecord(count + 1)
        Else
            Exit While
        End If
    End While
    If prevflag = False Then
        OrderIDData.Text = 0
    End If
End Sub

Protected Sub SearchOrderID_Click(sender As Object, e As EventArgs) Handles
SearchOrderID.Click
    Dim temp As Integer
    Dim ans As String
    Dim flag As Boolean = False
    ans = InputBox("Enter ID")
    If ans <> "" Then
        Dim reader As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Order_ID")
            If temp = ans Then
                OrderIDData.Text = temp + 1
                readyfilter.Checked = False
                paidfilter.Checked = False
                CompletedDropDownList.Text = ""
                NameFilterDropDownList.SelectedIndex = -1
                displayInformation(1, 0)
                OrderIDData.Text = temp
                flag = True
                Exit While
            End If
        End While
        reader.Close()
        If flag = False Then
            MsgBox("ID not found.", MsgBoxStyle.Exclamation)
        End If
    End If
End Sub

Protected Sub SortByDate_CheckedChanged(sender As Object, e As EventArgs) Handles
SortByDate.CheckedChanged

```



```

        <ajaxToolkit:ComboBox ID="NameFilterDropDownList" runat="server"
AutoCompleteMode="SuggestAppend" DataSourceID="CustInfoSource"
DataTextField="Customer_Name" DataValueField="Customer_Name"
DropDownStyle="DropDownList" style="display: inline;" Width="60px"
AutoPostBack="True">
        <asp:ListItem Selected="True"></asp:ListItem>
    </ajaxToolkit:ComboBox>
    &nbsp;
    <asp:Button ID="ClearButton" runat="server" Text="Clear"/>
</td>
</tr>
<tr>
    <td align="left">
        <asp:Label ID="CustomerNameLabel" runat="server" Text="Name:">
        </asp:Label>
        <asp:Label ID="CustomerNameData" runat="server"></asp:Label>
    </td>
</tr>
<tr>
    <td>
        <asp:Label ID="DateofOrderLabel" runat="server" Text="Date of Order:">
        </asp:Label>
        <asp:Label ID="DateofOrderData" runat="server">
        </asp:Label>
    </td>
</tr>
<tr>
    <td>
        <asp:Label ID="DatetobeShippedLabel" runat="server" Text="Date to be
Shipped:">
        </asp:Label>
        <asp:Label ID="DatetobeShippedData" runat="server"></asp:Label>
    </td>
</tr>
<tr>
    <td align="left">
        <asp:Label ID="TotalPriceLabel" runat="server" Text="Total Price: Rp.
"></asp:Label>
        <asp:Label ID="TotalPriceData" runat="server"></asp:Label>
    </td>
</tr>
<tr>
    <td>
        <asp:GridView ID="GridView1" runat="server"
DataSourceID="GridViewDataSource2" EnableSortingAndPagingCallbacks="True"
AutoGenerateColumns="False" HorizontalAlign="left">
            <Columns>
                <asp:BoundField DataField="Product_Name" HeaderText="Product_Name"
SortExpression="Product_Name" />
                <asp:BoundField DataField="Amount" HeaderText="Amount"
SortExpression="Amount" />
            </Columns>
        </asp:GridView>
    </td>
    <td align="left">
        <br />

```

```

        <asp:Label ID="StatusLabel" runat="server" Text="Status:"></asp:Label>
        <asp:Label ID="CompletedData" runat="server"></asp:Label>
    <br />
    <br />
    <asp:Label ID="PaidLabel" runat="server" Text="Paid?:">
    </asp:Label>
    <asp:Label ID="PaidData" runat="server"></asp:Label>
    <br />
    <br />
    <asp:Label ID="ReadyLabel" runat="server" Text="Ready to be shipped?:">
    </asp:Label>
    <asp:Label ID="ReadyData" runat="server"></asp:Label>
    </td>
</tr>
<tr>
<td>
    &nbsp;
</td>
</tr>
<tr>
<td>
        <asp:Button ID="previousbutton" runat="server" Text="Previous" />
        &nbsp; &nbsp; &nbsp;
        <asp:Button ID="nextbutton" runat="server" Text="Next" />
    </td>
    <td align="right">
        <asp:Button ID="Home" runat="server" Text="Back to Home"
PostBackUrl="~/home.aspx" />
    </td>
</tr>
</table>
<div>
    <asp:ScriptManager ID="ScriptManager1" runat="server">
    </asp:ScriptManager>
    <asp:AccessDataSource ID="GridViewDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
    SelectCommand="SELECT Product_List.Product_Name, Products_of_Orders.Amount
FROM (Product_List INNER JOIN Products_of_Orders ON Product_List.Product_ID =
Products_of_Orders.Product_ID) WHERE Products_of_Orders.Order_ID = @orderid">
    <SelectParameters>
        <asp:controlparameter name="@orderid" controlid="OrderIDData"
propertyname="Text"/>
    </SelectParameters>
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="CustInfoSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
    SelectCommand="SELECT * FROM [Customer_Information]">
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="LoadDataSource1" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
    SelectCommand="SELECT [Order_ID], [Customer_ID] FROM [Orders]">
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="LoadDataSource2" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"

```

```

        SelectCommand="SELECT [Customer_ID], [Customer_Name] FROM
[Customer_Information]">
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="OrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Orders]">
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="GridViewDataSource2" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb"
SelectCommand="SELECT Product_List.Product_Name, Products_of_Orders.Amount
FROM (Product_List INNER JOIN Products_of_Orders ON Product_List.Product_ID =
Products_of_Orders.Product_ID) WHERE Products_of_Orders.Order_ID = @orderid">
    <SelectParameters>
    <asp:ControlParameter ControlID="OrderIDData" Name="@orderid"
PropertyName="Text" />
    </SelectParameters>
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="AccessDataSource1" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT Product_List.Product_Name, Products_of_Orders.Amount
FROM (Product_List INNER JOIN Products_of_Orders ON Product_List.Product_ID =
Products_of_Orders.Product_ID) WHERE Products_of_Orders.Order_ID = @orderid">
    <SelectParameters>
    <asp:ControlParameter ControlID="OrderIDData" Name="@orderid"
PropertyName="Text" />
    </SelectParameters>
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="LinkedLoadDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT Orders.Order_ID, Customer_Information.Customer_Name,
Orders.[Completed?], Orders.[Paid?], Orders.[Ready_to_be_shipped?],
Customer_Information.Customer_ID, Orders.Date_of_Order, Orders.Date_to_be_Shipped
FROM (Orders INNER JOIN Customer_Information ON Orders.Customer_ID =
Customer_Information.Customer_ID)">
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="TotalPriceSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT Product_List.Price, Products_of_Orders.Amount FROM
(Product_List INNER JOIN Products_of_Orders ON Product_List.Product_ID =
Products_of_Orders.Product_ID) WHERE Products_of_Orders.Order_ID = @orderid">
    <SelectParameters>
    <asp:controlparameter name="@orderid" controlId="OrderIDData"
propertyname="Text"/>
    </SelectParameters>
    </asp:AccessDataSource>
</div>
</form>
</body>
</html>

```

5. Edit Customer Information Page

5.1 Page Design

The screenshot shows a web form for editing customer information. On the left, there are labels and input fields: 'Customer ID:' with a text box containing '1', 'Customer Name:' with a text box containing 'Customer_Name', 'Phone Number:' with a text box containing '08123456789', and 'Address:' with a larger text area containing 'Address'. To the right of the 'Customer ID' field is a 'Search by ID' button. Further right are three buttons: 'Save', 'New Customer', and 'Delete Customer'. At the bottom left are 'Previous' and 'Next' buttons, and at the bottom right is a 'Back to Home' button.

5.2 Visual Basic Code

```
Partial Class Edit_CustInfo
    Inherits System.Web.UI.Page
    Public Sub displayInformation(ByVal flag As Integer)
        Dim nextflag As Boolean = False
        If flag = -1 Then
            Dim reader1 As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            reader1.Read()
            custID.Text = reader1("Customer_ID")
            custName.Text = reader1("Customer_Name")
            custAddress.Text = reader1("Address")
            custNumber.Text = reader1("Phone_Number")
            reader1.Close()
        ElseIf flag = 0 Then
            Dim nextid As Integer
            nextid = custID.Text
            getNextRecord(1)
            If custID.Text <> 0 Then
                Dim reader2 As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
                While reader2.Read()
                    If reader2("Customer_ID") = custID.Text Then
                        custName.Text = reader2("Customer_Name")
                        custAddress.Text = reader2("Address")
                        custNumber.Text = reader2("Phone_Number")
                    End If
                End While
                reader2.Close()
            Else
                custID.Text = nextid
            End If
        ElseIf flag = 1 Then
            Dim previd As Integer
```



```

        previd = custID.Text
        getPreviousRecord(1)
        If custID.Text <> 0 Then
            Dim reader2 As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            While reader2.Read()
                If reader2("Customer_ID") = custID.Text Then
                    custName.Text = reader2("Customer_Name")
                    custAddress.Text = reader2("Address")
                    custNumber.Text = reader2("Phone_Number")
                End If
            End While
            reader2.Close()
        Else
            custID.Text = previd
        End If
    End If
End Sub

Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
    If custID.Text = "" Then
        displayInformation(-1)
    End If

End Sub

Protected Sub nextCust_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles nextCust.Click
    displayInformation(0)
End Sub

Protected Sub prevCust_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles prevCust.Click
    Dim reader As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    Dim emptyflag As Boolean
    emptyflag = False
    While reader.Read()
        If custID.Text = reader("Customer_ID") Then
            displayInformation(1)
            emptyflag = True
            Exit While
        End If
    End While
    reader.Close()
    If emptyflag = False Then
        MsgBox("Please save the new customer first.", MsgBoxStyle.Exclamation)
    End If
End Sub

Protected Sub save_Click(ByVal sender As Object, ByVal e As System.EventArgs) Handles
save.Click
    Dim newcustflag As Integer = 0
    Dim reader5 As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader5.Read()
        If custID.Text = reader5("Customer_ID") Then
            newcustflag = 1

```

```

        CustomerDataSource.UpdateParameters("custname").DefaultValue =
custName.Text
        CustomerDataSource.UpdateParameters("address").DefaultValue =
custAddress.Text
        CustomerDataSource.UpdateParameters("phone").DefaultValue =
custNumber.Text
        CustomerDataSource.Update()
        MsgBox("Changes successfully saved.")
        Exit While
    End If
End While
reader5.Close()
If newcustflag = 0 Then
    CustomerDataSource.InsertParameters("custid").DefaultValue =
CInt(custID.Text)
    CustomerDataSource.InsertParameters("custname").DefaultValue =
CStr(custName.Text)
    CustomerDataSource.InsertParameters("address").DefaultValue =
CStr(custAddress.Text)
    CustomerDataSource.InsertParameters("phone").DefaultValue =
CStr(custNumber.Text)
    CustomerDataSource.Insert()
    CancelButton.Visible = False
    MsgBox("New customer successfully added.")
End If
newCust.Visible = True
delCust.Visible = True
End Sub
Protected Sub newCust_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles newCust.Click
    Dim reader As Data.IDataReader =
CType(CustSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        custID.Text = reader("custid") + 1
    End While
    reader.Close()
    custName.Text = ""
    custNumber.Text = ""
    custAddress.Text = ""
    newCust.Visible = False
    delCust.Visible = False
    SearchCustID.Visible = False
    CancelButton.Visible = True
End Sub
Protected Sub delCust_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles delCust.Click
    Dim ans As String
    Dim id As Integer
    ans = MsgBox("Are you sure you want to delete this Customer?", MsgBoxStyle.YesNo)
    If ans = MsgBoxResult.Yes Then
        id = custID.Text
        displayInformation(-1)
        CustomerDataSource.DeleteParameters("custid").DefaultValue = id
        CustomerDataSource.Delete()
        OrdersDataSource.DeleteParameters("custid").DefaultValue = id
        OrdersDataSource.Delete()
        MsgBox("Customer successfully deleted.")
    End If

```

```

        displayInformation(-1)
    End Sub
    Protected Sub CancelButton_Click(sender As Object, e As EventArgs) Handles
CancelButton.Click
        displayInformation(-1)
        CancelButton.Visible = False
        newCust.Visible = True
        delCust.Visible = True
        SearchCustID.Visible = True
    End Sub
    Protected Sub SearchCustID_Click(sender As Object, e As EventArgs) Handles
SearchCustID.Click
        Dim temp As Integer
        Dim ans As String
        Dim flag As Boolean = False
        ans = InputBox("Enter ID")
        If ans <> "" Then
            Dim reader As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            While reader.Read()
                temp = reader("Customer_ID")
                If temp = ans Then
                    custID.Text = temp + 1
                    displayInformation(1)
                    custID.Text = temp
                    flag = True
                    Exit While
                End If
            End While
            reader.Close()
            If flag = False Then
                MsgBox("ID not found.", MsgBoxStyle.Exclamation)
            End If
        End If
    End Sub
    Public Function getMaxID() As Integer
        Dim maxid, temp As Integer
        maxid = 0
        Dim reader As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Customer_ID")
            If maxid < temp Then
                maxid = temp
            End If
        End While
        reader.Close()
        Return maxid
    End Function
    Public Function getMinID() As Integer
        Dim minid, temp As Integer
        minid = 999999999
        Dim reader As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Customer_ID")
            If minid > temp Then
                minid = temp
            End If
        End While
        reader.Close()
        Return minid
    End Function

```

```

        End If
    End While
    reader.Close()
    Return minid
End Function
Public Sub getNextRecord(ByVal count As Integer)
    Dim nextflag As Boolean = False
    Dim tempid As Integer
    While Val(CInt(custID.Text) + count) <= getMaxID() And nextflag = False
        Dim reader As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            tempid = reader("Customer_ID")
            If Val(CInt(custID.Text) + count) = tempid Then
                nextflag = True
                custID.Text = tempid
                Exit While
            End If
        End While
        reader.Close()
        If nextflag = False Then
            nextflag = True
            getNextRecord(count + 1)
        Else
            Exit While
        End If
    End While
    If nextflag = False Then
        custID.Text = 0
    End If
End Sub
Public Sub getPreviousRecord(ByVal count As Integer)
    Dim prevflag As Boolean = False
    Dim tempid As Integer
    While Val(CInt(custID.Text) - count) >= getMinID() And prevflag = False
        Dim reader As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            tempid = reader("Customer_ID")
            If Val(CInt(custID.Text) - count) = tempid Then
                prevflag = True
                custID.Text = tempid
                Exit While
            End If
        End While
        reader.Close()
        If prevflag = False Then
            prevflag = True
            getPreviousRecord(count + 1)
        Else
            Exit While
        End If
    End While
    If prevflag = False Then
        custID.Text = 0
    End If
End Sub
End Class

```

5.3 ASPX Code

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Edit_CustInfo.aspx.vb"
Inherits="Edit_CustInfo" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
    <title>Edit Customer Information</title>

</head>
<body>
    <form id="Edit_CustInfo" runat="server">
        <table style="margin:auto; width:35%; margin-top:10%; text-align:left">
            <tr>
                <td>
                    <asp:Label ID="custIDLabel" runat="server" Text="Customer ID:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custID" runat="server" Text=""></asp:Label>
                    &nbsp;
                    <asp:Button ID="SearchCustID" runat="server" Text="Search by ID" />
                </td>
                <td rowspan="7" align="right">
                    <asp:Button ID="save" runat="server" Text="Save" width="90px"/>
                    <br />
                    <br />
                    <asp:Button ID="newCust" runat="server" Text="New &#13; Customer"
width="90px"/>
                    <br />
                    <br />
                    <asp:Button ID="delCust" runat="server" Text="Delete &#13; Customer"
width="90px"/>
                    <br />
                    <br />
                    <asp:Button ID="CancelButton" runat="server" Text="Cancel"
Visible="False" width="90px"/>
                </td>
            </tr>
            <tr>
                <td>
                    <asp:Label ID="custNameLabel" runat="server" Text="Customer
Name:"></asp:Label>
                </td>
                <td>
                    <asp:TextBox ID="custName" runat="server" Height="15px"
Width="200px"></asp:TextBox>
                </td>
            </tr>
            <tr>
                <td>
                    <asp:Label ID="custNumberLabel" runat="server" Text="Phone
Number:"></asp:Label>
                </td>
                <td>
```

[illegible]

```
</DeleteParameters>
<InsertParameters>
<asp:Parameter name="custid" DefaultValue="" />
<asp:Parameter name="custname" DefaultValue="" dbtype="String" />
<asp:Parameter name="address" DefaultValue="" dbtype="String"/>
<asp:Parameter name="phone" DefaultValue="" dbtype="String"/>
</InsertParameters>
<UpdateParameters>
<asp:Parameter name="custname" DefaultValue="" />
<asp:Parameter name="address" DefaultValue="" />
<asp:Parameter name="phone" DefaultValue="" />
<asp:ControlParameter name="@custid" ControlID="custID" PropertyName="Text"
/>

</UpdateParameters>
</asp:AccessDataSource>

</form>
</body>
</html>
```

6. View Customer Information Page

6.1 Page Design

Customer ID:	1	<input type="button" value="Search by ID"/>	<div>Search Name: <input type="text"/></div> <div><input type="button" value="Search"/></div>
Customer Name:	Customer_Name		
Phone Number:	08123456789		
Address:	Address		
<div><input type="button" value="Previous"/> <input type="button" value="Next"/></div>		<div><input type="button" value="Back to Home"/></div>	

6.2 Visual Basic Code

```
Imports System.Data
Partial Class View_CustInfo
    Inherits System.Web.UI.Page
    Dim flag As Integer
    Public Sub displayInformation(ByVal flag As Integer, ByVal filtercount As Integer)
        Dim filterflag As Boolean
        filterflag = True
        If flag = -1 Then
            Dim reader1 As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            reader1.Read()
            custID.Text = reader1("Customer_ID")
            custName.Text = reader1("Customer_Name")
            custAddress.Text = reader1("Address")
            custNumber.Text = reader1("Phone_Number")
            reader1.Close()
        ElseIf flag = 0 Then
            Dim nextid As Integer
            nextid = custID.Text
            getNextRecord(1)
            If custID.Text <> 0 Then
                Dim reader2 As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
                While reader2.Read()
                    If reader2("Customer_ID") = custID.Text Then
                        custName.Text = reader2("Customer_Name")
                        custAddress.Text = reader2("Address")
                        custNumber.Text = reader2("Phone_Number")
                    End If
                End While
                reader2.Close()
            Else
                custID.Text = nextid
                flag = 1
            End If
        ElseIf flag = 1 Then
            Dim previd As Integer
```



```

        previd = custID.Text
        getPreviousRecord(1)
        If custID.Text <> 0 Then
            Dim reader2 As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            While reader2.Read()
                If reader2("Customer_ID") = custID.Text Then
                    custName.Text = reader2("Customer_Name")
                    custAddress.Text = reader2("Address")
                    custNumber.Text = reader2("Phone_Number")
                End If
            End While
            reader2.Close()
        Else
            custID.Text = previd
            flag = 0
        End If
    End If
    If NameSearchData.Text <> "" Then
        If NameSearchData.Text.Substring(0, NameSearchData.Text.Length) <>
custName.Text.Substring(0, NameSearchData.Text.Length) Then
            filterflag = False
        End If
    End If
    If filtercount <= getRecordCount() Then
        If filterflag = False Then
            filtercount = filtercount + 1
            If flag = -1 Then
                displayInformation(0, filtercount)
            Else
                displayInformation(flag, filtercount)
            End If
        End If
    End If
    Else
        MsgBox("No customers found.")
        NameSearchData.Text = ""
        displayInformation(-1, 0)
    End If
End Sub
Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
    If custID.Text = "" Then
        displayInformation(-1, 0)
    End If
End Sub
Protected Sub nextCust_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles nextCust.Click
    displayInformation(0, -99999)
End Sub
Protected Sub prevCust_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles prevCust.Click
    displayInformation(1, -99999)
End Sub
Protected Sub SearchCustID_Click(sender As Object, e As EventArgs) Handles
SearchCustID.Click
    Dim temp As Integer
    Dim ans As String
    Dim flag As Boolean = False

```

```

    ans = InputBox("Enter ID")
    If ans <> "" Then
        Dim reader As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Customer_ID")
            If temp = ans Then
                custID.Text = temp + 1
                displayInformation(1, 0)
                custID.Text = temp
                flag = True
                NameSearchData.Text = ""
                Exit While
            End If
        End While
        reader.Close()
        If flag = False Then
            MsgBox("ID not found.", MsgBoxStyle.Exclamation)
        End If
    End If
End Sub

Public Function getMaxID() As Integer
    Dim maxid, temp As Integer
    maxid = 0
    Dim reader As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        temp = reader("Customer_ID")
        If maxid < temp Then
            maxid = temp
        End If
    End While
    reader.Close()
    Return maxid
End Function

Public Function getMinID() As Integer
    Dim minid, temp As Integer
    minid = 999999999
    Dim reader As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        temp = reader("Customer_ID")
        If minid > temp Then
            minid = temp
        End If
    End While
    reader.Close()
    Return minid
End Function

Public Sub getNextRecord(ByVal count As Integer)
    Dim nextflag As Boolean = False
    Dim tempid As Integer
    While Val(CInt(custID.Text) + count) <= getMaxID() And nextflag = False
        Dim reader As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            tempid = reader("Customer_ID")
            If Val(CInt(custID.Text) + count) = tempid Then

```

```

        nextflag = True
        custID.Text = tempid
        Exit While
    End If
End While
reader.Close()
If nextflag = False Then
    nextflag = True
    getNextRecord(count + 1)
Else
    Exit While
End If
End While
If nextflag = False Then
    custID.Text = 0
End If
End Sub
Public Sub getPreviousRecord(ByVal count As Integer)
    Dim prevflag As Boolean = False
    Dim tempid As Integer
    While Val(CInt(custID.Text) - count) >= getMinID() And prevflag = False
        Dim reader As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            tempid = reader("Customer_ID")
            If Val(CInt(custID.Text) - count) = tempid Then
                prevflag = True
                custID.Text = tempid
                Exit While
            End If
        End While
        reader.Close()
        If prevflag = False Then
            prevflag = True
            getPreviousRecord(count + 1)
        Else
            Exit While
        End If
    End While
    If prevflag = False Then
        custID.Text = 0
    End If
End Sub
Public Function getRecordCount() As Integer
    Dim count As Integer
    Dim countreader As Data.IDataReader =
CType(CustomerDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While countreader.Read()
        count = count + 1
    End While
    countreader.Close()
    Return count
End Function
Protected Sub SearchName_Click(sender As Object, e As EventArgs) Handles
SearchName.Click
    displayInformation(-1, 0)
End Sub
End Class

```

6.3 ASPX Code

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="View_CustInfo.aspx.vb"
Inherits="View_CustInfo" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head id="Head1" runat="server">
    <title>View Customer Information</title>
</head>
<body>
    <form id="Edit_CustInfo" runat="server">
        <table style="margin:auto;width:36%;margin-top:10%;text-align:left">
            <tr>
                <td>
                    <asp:Label ID="custIDLabel" runat="server" Text="Customer ID:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custID" runat="server" Text=""></asp:Label>
                    &nbsp; &nbsp; &nbsp; &nbsp;
                    <asp:Button ID="SearchCustID" runat="server" Text="Search by ID" />
                </td>
            <tr>
                <td rowspan="3" align="right" style="border: 1px solid black;padding:2%">
                    <asp:Label ID="CustNameSearchLabel" runat="server" Text="Search
Name:"></asp:Label>
                    <asp:TextBox ID="NameSearchData" runat="server"
Width="80px"></asp:TextBox>
                    <br />
                    <br />
                    <asp:Button ID="SearchName" runat="server" Text="Search" />
                </td>
                <td>
                    </tr>
                <tr>
                <td>
                    <asp:Label ID="custNameLabel" runat="server" Text="Customer
Name:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custName" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custNumberLabel" runat="server" Text="Phone
Number:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custNumber" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custAddressLabel" runat="server" Text="Address:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custAddress" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custCityLabel" runat="server" Text="City:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custCity" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custStateLabel" runat="server" Text="State:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custState" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custZipLabel" runat="server" Text="Zip:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custZip" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custCountryLabel" runat="server" Text="Country:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custCountry" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custEmailLabel" runat="server" Text="Email:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custEmail" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custPhoneLabel" runat="server" Text="Phone:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custPhone" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custFaxLabel" runat="server" Text="Fax:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custFax" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custWebLabel" runat="server" Text="Web:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custWeb" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custNotesLabel" runat="server" Text="Notes:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custNotes" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custCommentsLabel" runat="server" Text="Comments:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custComments" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custStatusLabel" runat="server" Text="Status:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custStatus" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custPasswordLabel" runat="server" Text="Password:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custPassword" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custConfirmPasswordLabel" runat="server" Text="Confirm Password:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custConfirmPassword" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custForgotPasswordLabel" runat="server" Text="Forgot Password:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custForgotPassword" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custResetPasswordLabel" runat="server" Text="Reset Password:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custResetPassword" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custCancelLabel" runat="server" Text="Cancel:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custCancel" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custSaveLabel" runat="server" Text="Save:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custSave" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custDeleteLabel" runat="server" Text="Delete:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custDelete" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custAddLabel" runat="server" Text="Add:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custAdd" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custUpdateLabel" runat="server" Text="Update:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custUpdate" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custSearchLabel" runat="server" Text="Search:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custSearch" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custFilterLabel" runat="server" Text="Filter:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custFilter" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custSortLabel" runat="server" Text="Sort:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custSort" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custPageLabel" runat="server" Text="Page:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custPage" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custTotalLabel" runat="server" Text="Total:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custTotal" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custCountLabel" runat="server" Text="Count:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custCount" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custMaxLabel" runat="server" Text="Max:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custMax" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custMinLabel" runat="server" Text="Min:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custMin" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custAvgLabel" runat="server" Text="Avg:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custAvg" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custSumLabel" runat="server" Text="Sum:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custSum" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custDiffLabel" runat="server" Text="Diff:"></asp:Label>
                </td>
                <td>
                    <asp:Label ID="custDiff" runat="server" Text=""></asp:Label>
                </td>
            <tr>
                <td>
                    <asp:Label ID="custProductLabel" runat="server" Text="Product:"></asp:Label>
                </
```

```
</td>
<td rowspan="4" style="vertical-align:top">
<asp:Label ID="custAddress" runat="server" Text="" Width="100px"></asp:Label>
</td>

</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td align="center">
&ampnbsp&nbsp;&nbsp;</td>
</tr>
<tr>
<td>
&nbsp;&nbsp;&
</td>
</tr>
<tr>
<td colspan="2">
<asp:Button ID="prevCust" runat="server" Text="Previous" />
&nbsp;&nbsp;& &nbsp;& &nbsp;&
<asp:Button ID="nextCust" runat="server" Text="Next" />
</td>
<td align="right">
<asp:Button ID="Home" runat="server" Text="Back to Home"
PostBackUrl="~/home.aspx" />
</td>
</tr>
</table>
<asp:AccessDataSource ID="CustomerDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT Customer_ID, Customer_Name, Address, Phone_Number FROM
Customer_Information ORDER BY Customer_ID">
</asp:AccessDataSource>
<asp:AccessDataSource ID="CustSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT MAX(Customer_ID) AS custid FROM
[Customer_Information]">
</asp:AccessDataSource>
<asp:AccessDataSource ID="OrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb"
SelectCommand="SELECT * FROM [Orders]">
</asp:AccessDataSource>

</form>
</body>
</html>
```

7. Edit Products Page

7.1 Page Design

Product ID: 1

Name:

Price: Rp.

Cost: Rp. 10

Ingredient Name	Amount Needed
Ingredient Name	1

Ingredient to be Deleted:

7.2 Visual Basic Code

```
Partial Class Edit_Products
    Inherits System.Web.UI.Page
    Public Sub displayInformation(ByVal flag As Integer)
        Dim nextflag As Boolean = False
        If flag = -1 Then
            Dim reader1 As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            reader1.Read()
            ProductIDData.Text = reader1("Product_ID")
            ProductNameData.Text = reader1("Product_Name")
            ProductPriceData.Text = reader1("Price")
            reader1.Close()
        ElseIf flag = 0 Then
            Dim nextid As Integer
            nextid = ProductIDData.Text
            getNextRecord(1)
            If ProductIDData.Text <> 0 Then
                Dim reader2 As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
                While reader2.Read()
                    If reader2("Product_ID") = ProductIDData.Text Then
                        ProductIDData.Text = reader2("Product_ID")
                        ProductNameData.Text = reader2("Product_Name")
                        ProductPriceData.Text = reader2("Price")
                    End If
                End While
                reader2.Close()
            Else
                ProductIDData.Text = nextid
            End If
        ElseIf flag = 1 Then
```

```

        Dim previd As Integer
        previd = ProductIDData.Text
        getPreviousRecord(1)
        If ProductIDData.Text <> 0 Then
            Dim reader2 As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            While reader2.Read()
                If reader2("Product_ID") = ProductIDData.Text Then
                    ProductIDData.Text = reader2("Product_ID")
                    ProductNameData.Text = reader2("Product_Name")
                    ProductPriceData.Text = reader2("Price")
                End If
            End While
            reader2.Close()
        Else
            ProductIDData.Text = previd
        End If
    End If
    selectIngredientGridView()
End Sub
Public Sub refreshAmount()
    GridView1.DataBind()
    If GridView1.Rows.Count > 0 Then
        If IngredientDropDownList.SelectedItem IsNot Nothing Then
            Dim reader1 As Data.IDataReader =
CType(GridViewDataSource2.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            Dim flag As Integer = 0
            AmountInput.Text = 0
            While reader1.Read()
                If IngredientDropDownList.SelectedItem.Text =
reader1("Ingredient_Name") Then
                    AmountInput.Text = reader1("Amount_Needed")
                    Exit While
                Else
                    AmountInput.Text = 0
                End If
            End While
            reader1.Close()
        Else
            selectIngredientGridView()
        End If
    Else
        AmountInput.Text = 0
    End If
End Sub
Public Sub selectIngredientGridView()
    Dim flag As Boolean = False
    Dim reader2 As Data.IDataReader =
CType(GridViewDataSource2.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    reader2.Read()
    Dim reader1 As Data.IDataReader =
CType(IngredientsNeededDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
    While reader1.Read()
        If ProductIDData.Text = reader1("Product_ID") Then
            IngredientDropDownList.SelectedValue = reader2("Ingredient_ID")
            flag = True
            Exit While
        End If
    End While
End Sub

```

```

        End If
    End While
    reader1.Close()
    reader2.Close()
    If flag = False Then
        Dim reader3 As Data.IDataReader =
CType(IngredientListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        reader3.Read()
        IngredientDropDownList.Items.FindByText(reader3("Ingredient_Name")).Selected
= True
        reader3.Close()
    End If
    refreshAmount()
End Sub
Protected Sub PreviousRecord_Click(ByVal sender As Object, ByVal e As
System.EventArgs) Handles PreviousRecord.Click
    Dim reader As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    Dim emptyflag As Boolean
    emptyflag = False
    While reader.Read()
        If ProductIDData.Text = reader("Product_ID") Then
            displayInformation(1)
            refreshAmount()
            emptyflag = True
            Exit While
        End If
    End While
    If emptyflag = False Then
        MsgBox("Please save the new product first.", MsgBoxStyle.Exclamation)
    End If
    checkTotalCost()
End Sub

Protected Sub NextRecord_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles NextRecord.Click
    displayInformation(0)
    refreshAmount()
    checkTotalCost()
End Sub

Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
    If Page.IsPostBack = False Then
        IngredientDropDownList.DataBind()
    End If

    If ProductIDData.Text = "" Then
        displayInformation(-1)
    End If
    checkTotalCost()
End Sub
Public Sub checkTotalCost()
    ProductCostData.Text = 0
    Dim reader1 As Data.IDataReader =
CType(GridViewDataSource2.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader1.Read()

```



```

        ProductCostData.Text = ProductCostData.Text +
checkCost(reader1("Ingredient_Name"), reader1("Amount_Needed"))
    End While
End Sub
Public Function checkCost(ByVal name As String, ByVal amount As Double) As Double
    Dim cost As Integer
    Dim reader2 As Data.IDataReader =
CType(IngredientListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader2.Read()
        If name = reader2("Ingredient_Name") Then
            cost = cost + reader2("Cost") * amount
        End If
    End While
    reader2.Close()
    Return cost
End Function
Protected Sub Save_Click(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Save.Click
    Dim neworderflag As Integer = 0
    Dim reader5 As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader5.Read()
        If ProductIDData.Text = reader5("Product_ID") Then
            neworderflag = 1
            Dim presenceflag As Integer = 0
            Dim reader As Data.IDataReader =
CType(GridViewDataSource2.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            While reader.Read()
                If IngredientDropDownList.SelectedItem.ToString =
reader("Ingredient_Name") Then
                    IngredientsNeededDataSource.Update()
                    ProductListDataSource.Update()
                    presenceflag = 1
                    MsgBox("Changes successfully saved.")
                End If
            End While
            reader.Close()
            If presenceflag = 0 Then
                IngredientsNeededDataSource.InsertParameters("amount").DefaultValue =
CInt(AmountInput.Text)

                IngredientsNeededDataSource.InsertParameters("ingredientid").DefaultValue =
IngredientDropDownList.SelectedValue

                IngredientsNeededDataSource.InsertParameters("productid").DefaultValue =
CInt(ProductIDData.Text)
                IngredientsNeededDataSource.Insert()
            End If
            GridView1.DataBind()
        End If
    End While
    reader5.Close()
    If neworderflag = 0 Then
        ProductListDataSource.InsertParameters("productid").DefaultValue =
ProductIDData.Text
        ProductListDataSource.InsertParameters("productname").DefaultValue =
ProductNameData.Text
    End If
End Sub

```

```

        ProductListDataSource.InsertParameters("productprice").DefaultValue =
ProductPriceData.Text
        ProductListDataSource.Insert()
        IngredientsNeededDataSource.InsertParameters("amount").DefaultValue =
CInt(AmountInput.Text)
        IngredientsNeededDataSource.InsertParameters("ingredientid").DefaultValue =
IngredientDropDownList.SelectedValue
        IngredientsNeededDataSource.InsertParameters("productid").DefaultValue =
CInt(ProductIDData.Text)
        IngredientsNeededDataSource.Insert()
        CancelButton.Visible = False
        NewProduct.Visible = True
        SearchProduct.Visible = True
        DeleteProduct.Visible = True
        DeleteIngredientLabel.Visible = True
        IngredientDeleteDropDownList.Visible = True
        DeleteIngredientButton.Visible = True
        SearchIngredientDelete.Visible = True
        MsgBox("New product successfully added.")
    End If
    IngredientDropDownList.Items.Clear()
    IngredientDropDownList.DataBind()
    IngredientDeleteDropDownList.DataBind()
    selectIngredientGridView()
    checkTotalCost()
End Sub
Protected Sub DropDownList1_TextChanged(ByVal sender As Object, ByVal e As
System.EventArgs) Handles IngredientDropDownList.TextChanged
    refreshAmount()
End Sub

Protected Sub NewProduct_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles NewProduct.Click
    Dim reader As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        ProductIDData.Text = reader("Product_ID") + 1
        AmountInput.Text = 0
        ProductNameData.Text = ""
        ProductPriceData.Text = ""
        ProductCostData.Text = ""
        IngredientDropDownList.SelectedIndex = 0
    End While
    reader.Close()
    refreshAmount()
    CancelButton.Visible = True
    NewProduct.Visible = False
    SearchProduct.Visible = False
    DeleteProduct.Visible = False
    DeleteIngredientLabel.Visible = False
    IngredientDeleteDropDownList.Visible = False
    DeleteIngredientButton.Visible = False
    SearchIngredientDelete.Visible = False
End Sub

Protected Sub DeleteProduct_Click(ByVal sender As Object, ByVal e As
System.EventArgs) Handles DeleteProduct.Click
    Dim ans As String

```

```

    Dim id As Integer
    ans = MsgBox("Are you sure you want to delete this product?", MsgBoxStyle.YesNo)
    If ans = MsgBoxResult.Yes Then
        id = ProductIDData.Text
        ProductListDataSource.DeleteParameters("productid").DefaultValue =
ProductIDData.Text
        ProductListDataSource.Delete()
        ProductsOfOrdersDataSource.DeleteParameters("productid").DefaultValue =
ProductIDData.Text
        ProductsOfOrdersDataSource.Delete()
        IngredientsNeededDataSource.DeleteParameters("productid").DefaultValue =
ProductIDData.Text
        IngredientsNeededDataSource.Delete()
        MsgBox("Product successfully deleted.")
        displayInformation(-1)
    End If

End Sub

Public Function getMaxID() As Integer
    Dim maxid, temp As Integer
    maxid = 0
    Dim reader As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        temp = reader("Product_ID")
        If maxid < temp Then
            maxid = temp
        End If
    End While
    reader.Close()
    Return maxid
End Function

Public Function getMinID() As Integer
    Dim minid, temp As Integer
    minid = 999999999
    Dim reader As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        temp = reader("Product_ID")
        If minid > temp Then
            minid = temp
        End If
    End While
    reader.Close()
    Return minid
End Function

Public Sub getNextRecord(ByVal count As Integer)
    Dim nextflag As Boolean = False
    Dim tempid As Integer
    While Val(CInt(ProductIDData.Text) + count) <= getMaxID() And nextflag = False
        Dim reader As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            tempid = reader("Product_ID")
            If Val(CInt(ProductIDData.Text) + count) = tempid Then
                nextflag = True
                ProductIDData.Text = tempid
            Exit While
        End While
    End While
End Sub

```

```

        End If
    End While
    reader.Close()
    If nextflag = False Then
        nextflag = True
        getNextRecord(count + 1)
    Else
        Exit While
    End If
End While
If nextflag = False Then
    ProductIDData.Text = 0
End If
End Sub
Public Sub getPreviousRecord(ByVal count As Integer)
    Dim prevflag As Boolean = False
    Dim tempid As Integer
    While Val(CInt(ProductIDData.Text) + count) >= getMinID() And prevflag = False
        Dim reader As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            tempid = reader("Product_ID")
            If Val(CInt(ProductIDData.Text) - count) = tempid Then
                prevflag = True
                ProductIDData.Text = tempid
                Exit While
            End If
        End While
        reader.Close()
        If prevflag = False Then
            prevflag = True
            getPreviousRecord(count + 1)
        Else
            Exit While
        End If
    End While
    If prevflag = False Then
        ProductIDData.Text = 0
    End If
End Sub
Protected Sub SearchOrder_Click(sender As Object, e As EventArgs) Handles
SearchProduct.Click
    Dim temp As Integer
    Dim ans As String
    Dim flag As Boolean = False
    ans = InputBox("Enter ID")
    If ans <> "" Then
        Dim reader As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Product_ID")
            If temp = ans Then
                ProductIDData.Text = temp + 1
                displayInformation(1)
                ProductIDData.Text = temp
                flag = True
                Exit While
            End If
        End While
    End If
End Sub

```

```

        End While
        reader.Close()
        If flag = False Then
            MsgBox("ID not found.", MsgBoxStyle.Exclamation)
        End If
    End If
End Sub

Protected Sub SearchIngredientDelete_Click(sender As Object, e As EventArgs) Handles
SearchIngredientDelete.Click
    Dim ans As String
    Dim flag As Boolean = False
    ans = InputBox("Enter ID")
    If ans <> "" Then
        Dim reader As Data.IDataReader =
CType(GridViewDataSource2.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            If reader("Ingredient_ID") = ans Then
                IngredientDeleteDropDownList.SelectedValue = reader("Ingredient_ID")
                flag = True
                Exit While
            End If
        End While
        reader.Close()
        If flag = False Then
            MsgBox("Ingredient not found.", MsgBoxStyle.Exclamation)
        End If
    End If
End Sub

Protected Sub DeleteIngredientButton_Click(sender As Object, e As EventArgs) Handles
DeleteIngredientButton.Click
    If IngredientDeleteDropDownList.SelectedItem IsNot Nothing Then
        Dim ans As String
        ans = MsgBox(("Are you sure you want to delete the ingredient: " &
IngredientDeleteDropDownList.SelectedItem.ToString & " from the product?"),
MsgBoxStyle.YesNo)
        If ans = MsgBoxResult.Yes Then
            GridViewDataSource2.DeleteParameters("productid").DefaultValue =
ProductIDData.Text
            GridViewDataSource2.DeleteParameters("ingredientid").DefaultValue =
IngredientDeleteDropDownList.SelectedValue
            GridViewDataSource2.Delete()
            refreshAmount()
            checkTotalCost()
            MsgBox("Ingredient successfully deleted from the order.")
            selectIngredientGridView()
        End If
    Else
        MsgBox("Please select the ingredient to be deleted from the order.",
MsgBoxStyle.Exclamation)
    End If
End Sub

Protected Sub SearchIngredient_Click(sender As Object, e As EventArgs) Handles
SearchIngredient.Click
    Dim ans As String
    Dim flag As Boolean = False
    ans = InputBox("Enter ID")
    If ans <> "" Then

```

```

        Dim reader As Data.IDataReader =
CType(IngredientListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            If reader("Ingredient_ID") = ans Then
                IngredientDropDownList.SelectedValue = reader("Ingredient_ID")
                flag = True
                Exit While
            End If
        End While
        reader.Close()
        If flag = False Then
            MsgBox("ID not found.", MsgBoxStyle.Exclamation)
        End If
        refreshAmount()
    End If
End Sub
Protected Sub CancelButton_Click(sender As Object, e As EventArgs) Handles
CancelButton.Click
    displayInformation(-1)
    CancelButton.Visible = False
    NewProduct.Visible = True
    SearchProduct.Visible = True
    DeleteProduct.Visible = True
    DeleteIngredientLabel.Visible = True
    IngredientDeleteDropDownList.Visible = True
    DeleteIngredientButton.Visible = True
    SearchIngredientDelete.Visible = True
End Sub
End Class

```

7.3 ASPX Code

```

<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Edit_Products.aspx.vb"
Inherits="Edit_Products" %>

<%@ Register assembly="AjaxControlToolkit" namespace="AjaxControlToolkit"
tagprefix="ajaxToolkit" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head id="Head1" runat="server">
    <title>Edit Products</title>
</head>
<body>
    <form id="Edit_Products" runat="server">
        <table style="margin:auto; width:37%; margin-top:10%; text-align:left">
            <tr>
                <td align="left">
                    <asp:Label ID="ProductIDLabel" runat="server" Text="Product ID:">
                    </asp:Label>

                    <asp:Label ID="ProductIDData" runat="server">
                    </asp:Label>
                    &nbsp;
                </td>
            </tr>
        </table>
    </form>
</body>

```

```

        <asp:Button ID="SearchProduct" runat="server" Text="Search by ID" />
    </td>
    <td align="center" rowspan="4">
        <asp:Button ID="Save" runat="server" Text="Save" Width="120px"/>
        <br />
        <br />
        <asp:Button ID="NewProduct" runat="server" Text="New&#13;Product"
Width="120px" />
        <br />
        <br />
        <asp:Button ID="DeleteProduct" runat="server" Text="Delete&#13;Product"
Width="120px" />
        <asp:Button ID="CancelButton" runat="server" Text="Cancel"
Visible="False" />
    </td>
</tr>
<tr>
    <td align="left">
        <asp:Label ID="ProductNameLabel" runat="server" Text="Name:">
</asp:Label>

        <asp:TextBox ID="ProductNameData" runat="server" Width="100px">
</asp:TextBox>
    </td>

</tr>
<tr>
    <td align="left">
        <asp:Label ID="ProductPriceLabel" runat="server" Text="Price: Rp.
"></asp:Label>

        <asp:TextBox ID="ProductPriceData" runat="server" Width="100px">
</asp:TextBox>
    </td>

</tr>
<tr>
    <td align="left">
        <asp:Label ID="ProductCostLabel" runat="server" Text="Cost: Rp.
"></asp:Label>

        <asp:Label ID="ProductCostData" runat="server">
</asp:Label>
    </td>

</tr>
<tr>
    <td>
        <ajaxToolkit:ComboBox ID="IngredientDropDownList" runat="server"
AutoCompleteMode="SuggestAppend" AutoPostBack="True"
DataSourceID="IngredientListDataSource" DataTextField="Ingredient_Name"
DataValueField="Ingredient_ID" DropDownStyle="DropDownList" MaxLength="0"
style="display: inline;" Width="60px">
</ajaxToolkit:ComboBox>
        &nbsp;
        <asp:TextBox ID="AmountInput" runat="server" Width="40px"></asp:TextBox>

```

```

        <ajaxToolkit:NumericUpDownExtender
ID="AmountInput_NumericUpDownExtender" runat="server"
BehaviorID="AmountInput_NumericUpDownExtender" Maximum="1.7976931348623157E+308"
Minimum="0" RefValues="" ServiceDownMethod="" ServiceDownPath="" ServiceUpMethod=""
Tag="" TargetButtonDownID="" TargetButtonUpID="" TargetControlID="AmountInput"
Width="40" />
        <asp:Button ID="SearchIngredient" runat="server" Text="Search by ID" />
    </td>
    <td rowspan="4">
        <div align="left">
            <asp:Label ID="DeleteIngredientLabel" runat="server" Text="Ingredient to
be Deleted:"></asp:Label>
            <br />
            <ajaxToolkit:ComboBox ID="IngredientDeleteDropDownList" runat="server"
AutoCompleteMode="SuggestAppend"
AutoPostBack="True"
DataSourceID="GridViewDataSource2" DataTextField="Ingredient_Name"
DataValueField="Ingredient_ID"
DropDownStyle="DropDownList" MaxLength="0" style="display: inline;" Width="60px">
</ajaxToolkit:ComboBox>
            &nbsp;<asp:Button ID="SearchIngredientDelete" runat="server"
Text="Search by ID" style="height: 26px" />
            <br />
            <br />
        </div>
        <div align="right" style="margin-right:7%">
            <asp:Button ID="DeleteIngredientButton" runat="server" Text="Delete
Ingredient" Width="120px"/>
        </div>
    </td>
</tr>
<tr>
<td style="height: 21px">
&nbsp;<br />
</td>
</tr>
<tr>
<td style="text-align:center">
        <asp:GridView ID="GridView1" runat="server"
DataSourceID="GridViewDataSource1" EnableSortingAndPagingCallbacks="True"
AutoGenerateColumns="False" HorizontalAlign="Left">
            <Columns>
                <asp:BoundField DataField="Ingredient_Name"
HeaderText="Ingredient_Name" SortExpression="Ingredient_Name" />
                <asp:BoundField DataField="Amount_Needed"
HeaderText="Amount_Needed" SortExpression="Amount_Needed" />
            </Columns>
        </asp:GridView>
    </td>
</tr>
<tr>
<td>
&nbsp;<br />
</td>
</tr>
<tr>
<td align="left">
        <asp:Button ID="PreviousRecord" runat="server" Text="Previous" />

```



```

        &nbsp; &nbsp; &nbsp; &nbsp;
        <asp:Button ID="NextRecord" runat="server" Text="Next" />
    </td>
    <td align="right">
        <asp:Button ID="Home" runat="server" Text="Back to Home"
PostBackUrl="~/home.aspx" />
    </td>
</tr>

</table>

    <asp:ScriptManager ID="ScriptManager1" runat="server">
</asp:ScriptManager>

    <asp:AccessDataSource ID="GridViewDataSource1" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb"
        SelectCommand="SELECT Ingredient_List.Ingredient_Name,
Ingredients_Needed.Amount_Needed FROM (Ingredients_Needed INNER JOIN Ingredient_List
ON Ingredients_Needed.Ingredient_ID = Ingredient_List.Ingredient_ID) WHERE
Ingredients_Needed.Product_ID = @productid ORDER BY
Ingredient_List.[Ingredient_ID]">
        <SelectParameters>
            <asp:controlparameter name="@productid" controlid="ProductIDData"
propertyname="Text"/>
        </SelectParameters>
    </asp:AccessDataSource>
    <asp:AccessDataSource ID="GridViewDataSource2" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
        SelectCommand="SELECT Ingredient_List.Ingredient_Name,
Ingredients_Needed.Amount_Needed, Ingredients_Needed.Ingredient_ID FROM
(Ingredients_Needed INNER JOIN Ingredient_List ON Ingredients_Needed.Ingredient_ID =
Ingredient_List.Ingredient_ID) WHERE Ingredients_Needed.Product_ID = @productid
ORDER BY Ingredient_List.[Ingredient_ID]"
        DeleteCommand="DELETE FROM Ingredients_Needed WHERE (Ingredient_ID =
@ingredientid AND Product_ID = @productid)">
        <SelectParameters>
            <asp:controlparameter name="@productid" controlid="productiddata"
propertyname="text" />
        </SelectParameters>
        <DeleteParameters>
            <asp:Parameter Name="ingredientid" DefaultValue="" />
            <asp:Parameter Name="productid" DefaultValue="" />
        </DeleteParameters>
    </asp:AccessDataSource>
    <asp:AccessDataSource ID="IngredientListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb"
        SelectCommand="SELECT * FROM [Ingredient_List]"
DataSourceMode="DataReader"></asp:AccessDataSource>
    <asp:AccessDataSource ID="ProductListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb"
        SelectCommand="SELECT * FROM [Product_List]" DataSourceMode="DataReader"
        DeleteCommand="DELETE FROM Product_List WHERE Product_ID = @productid"
        InsertCommand="INSERT INTO Product_List (Product_ID, Product_Name,
Price) VALUES (@productid, @productname, @price)"
        UpdateCommand="UPDATE Product_List SET Product_Name = @productname,
Price = @productprice WHERE (Product_ID = @productid)">
        <UpdateParameters>

```

```

        <asp:controlparameter name="@productname"
controlid="productnamedata" propertyname="text" />
        <asp:controlparameter name="@productprice"
controlid="productpricedata" propertyname="text" />
        <asp:controlparameter name="@productid"
controlid="productiddata" propertyname="text" />
    </UpdateParameters>
    <InsertParameters>
        <asp:Parameter Name="productid" DefaultValue="" />
        <asp:Parameter Name="productname" DefaultValue="" />
        <asp:Parameter Name="productprice" DefaultValue="" />
    </InsertParameters>
    <DeleteParameters>
        <asp:parameter name="productid" defaultvalue="" />
    </DeleteParameters>
    </asp:AccessDataSource>
    <asp:AccessDataSource ID="IngredientsNeededDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb"
SelectCommand="SELECT * FROM [Ingredients_Needed]"
DeleteCommand="DELETE FROM Ingredients_Needed WHERE Product_ID =
@productid"
InsertCommand="INSERT INTO Ingredients_Needed (Ingredient_ID,
Product_ID, Amount_Needed) VALUES (@ingredientid, @productid, @amount)"
UpdateCommand="UPDATE Ingredients_Needed SET Amount_Needed = @amount
WHERE (Product_ID = @productid AND Ingredient_ID = @ingredientid)"
DataSourceMode="DataReader">
    <UpdateParameters>
        <asp:controlparameter name="@amount" controlid="AmountInput"
propertyname="text" DbType="Int16" />
        <asp:controlparameter name="@productid"
controlid="productiddata" propertyname="text" />
        <asp:controlparameter name="@ingredientid"
controlid="IngredientDropDownList" propertyname="selectedvalue" />
    </UpdateParameters>
    <InsertParameters>
        <asp:Parameter Name="ingredientid" DefaultValue="" />
        <asp:Parameter Name="productid" DefaultValue="" />
        <asp:Parameter Name="amount" DefaultValue="" />
    </InsertParameters>
    <DeleteParameters>
        <asp:parameter name="productid" defaultvalue="" />
    </DeleteParameters>
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="ProductsOfOrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb"
SelectCommand="SELECT Products_of_Orders.* FROM Products_of_Orders"
DeleteCommand="DELETE FROM Products_of_Orders WHERE Product_ID =
@productid" DataSourceMode="DataReader">
    <DeleteParameters>
        <asp:parameter name="productid" defaultvalue="" />
    </DeleteParameters>
    </asp:AccessDataSource>

</form>
</body>
</html>

```

8. Edit Ingredients Page

8.1 Page Design

Ingredient ID: 1

Name:

Cost: Rp.

8.2 Visual Basic Code

```
Partial Class Edit_Ingredients
    Inherits System.Web.UI.Page
    Public Sub displayInformation(ByVal flag As Integer)
        Dim nextflag As Boolean = False
        If flag = -1 Then
            Dim reader1 As Data.IDataReader =
CType(IngredientListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
            reader1.Read()
            IngredientIDData.Text = reader1("Ingredient_ID")
            IngredientNameData.Text = reader1("Ingredient_Name")
            CostInput.Text = reader1("Cost")
            reader1.Close()
        ElseIf flag = 0 Then
            Dim nextid As Integer
            nextid = IngredientIDData.Text
            getNextRecord(1)
            If IngredientIDData.Text <> 0 Then
                Dim reader2 As Data.IDataReader =
CType(IngredientListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
                While reader2.Read()
                    If reader2("Ingredient_ID") = IngredientIDData.Text Then
                        IngredientIDData.Text = reader2("Ingredient_ID")
                        IngredientNameData.Text = reader2("Ingredient_Name")
                        CostInput.Text = reader2("Cost")
                    End If
                End While
                reader2.Close()
            Else
                IngredientIDData.Text = nextid
            End If
        ElseIf flag = 1 Then
            Dim previd As Integer
            previd = IngredientIDData.Text
            getPreviousRecord(1)
            If IngredientIDData.Text <> 0 Then
```

```

        Dim reader2 As Data.IDataReader =
CType(IngredientListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader2.Read()
            If reader2("Ingredient_ID") = IngredientIDData.Text Then
                IngredientIDData.Text = reader2("Ingredient_ID")
                IngredientNameData.Text = reader2("Ingredient_Name")
                CostInput.Text = reader2("Cost")
            End If
        End While
        reader2.Close()
    Else
        IngredientIDData.Text = previd
    End If
End If
End Sub
Protected Sub PreviousRecord_Click(ByVal sender As Object, ByVal e As
System.EventArgs) Handles PreviousRecord.Click
    Dim reader As Data.IDataReader =
CType(IngredientListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    Dim emptyflag As Boolean
    emptyflag = False
    'efficient sequential search
    While reader.Read()
        If IngredientIDData.Text = reader("Ingredient_ID") Then
            displayInformation(1)
            emptyflag = True
            Exit While
        End If
    End While
    If emptyflag = False Then
        MsgBox("Please save the new order first.")
    End If
End Sub
Protected Sub NextRecord_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles NextRecord.Click
    displayInformation(0)
End Sub
Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
    If IngredientIDData.Text = "" Then
        displayInformation(-1)
    End If
End Sub
Protected Sub Save_Click(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Save.Click
    Dim neworderflag As Integer = 0
    Dim reader5 As Data.IDataReader =
CType(IngredientListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader5.Read()
        If IngredientIDData.Text = reader5("Ingredient_ID") Then
            neworderflag = 1
            IngredientListDataSource.Update()
            MsgBox("Changes successfully saved.")
        End If
    End While
    reader5.Close()
    If neworderflag = 0 Then

```

```

        IngredientListDataSource.InsertParameters("ingredientid").DefaultValue =
IngredientIDData.Text
        IngredientListDataSource.InsertParameters("ingredientname").DefaultValue =
IngredientNameData.Text
        IngredientListDataSource.InsertParameters("cost").DefaultValue =
CostInput.Text
        IngredientListDataSource.Insert()
        CancelButton.Visible = False
        NewIngredient.Visible = True
        DeleteIngredient.Visible = True
        MsgBox("New ingredient successfully added.")
    End If
End Sub
Protected Sub NewProduct_Click(ByVal sender As Object, ByVal e As System.EventArgs)
Handles NewIngredient.Click
    Dim reader As Data.IDataReader =
CType(IngredientListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        IngredientIDData.Text = reader("Ingredient_ID") + 1
        CostInput.Text = 0
        IngredientNameData.Text = ""
    End While
    reader.Close()
    CancelButton.Visible = True
    NewIngredient.Visible = False
    DeleteIngredient.Visible = False
End Sub
Protected Sub DeleteProduct_Click(ByVal sender As Object, ByVal e As
System.EventArgs) Handles DeleteIngredient.Click
    IngredientListDataSource.DeleteParameters("ingredientid").DefaultValue =
IngredientIDData.Text
    IngredientListDataSource.Delete()
    IngredientsNeededDataSource.DeleteParameters("ingredientid").DefaultValue =
IngredientIDData.Text
    IngredientsNeededDataSource.Delete()
    displayInformation(-1)
    MsgBox("Ingredient successfully deleted.")
End Sub
Public Function getMaxID() As Integer
    Dim maxid, temp As Integer
    maxid = 0
    Dim reader As Data.IDataReader =
CType(IngredientListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        temp = reader("Ingredient_ID")
        If maxid < temp Then
            maxid = temp
        End If
    End While
    reader.Close()
    Return maxid
End Function
Public Function getMinID() As Integer
    Dim minid, temp As Integer
    minid = 999999999
    Dim reader As Data.IDataReader =
CType(IngredientListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()

```

```

        temp = reader("Ingredient_ID")
        If minid > temp Then
            minid = temp
        End If
    End While
    reader.Close()
    Return minid
End Function

Public Sub getNextRecord(ByVal count As Integer)
    Dim nextflag As Boolean = False
    Dim tempid As Integer
    While Val(CInt(IngredientIDData.Text) + count) <= getMaxID() And nextflag = False
        Dim reader As Data.IDataReader =
CType(IngredientListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            tempid = reader("Ingredient_ID")
            If Val(CInt(IngredientIDData.Text) + count) = tempid Then
                nextflag = True
                IngredientIDData.Text = tempid
            Exit While
            End If
        End While
        reader.Close()
        If nextflag = False Then
            nextflag = True
            getNextRecord(count + 1)
        Else
            Exit While
        End If
    End While
    If nextflag = False Then
        IngredientIDData.Text = 0
    End If
End Sub

Public Sub getPreviousRecord(ByVal count As Integer)
    Dim prevflag As Boolean = False
    Dim tempid As Integer
    While Val(CInt(IngredientIDData.Text) + count) >= getMinID() And prevflag = False
        Dim reader As Data.IDataReader =
CType(IngredientListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            tempid = reader("Ingredient_ID")
            If Val(CInt(IngredientIDData.Text) - count) = tempid Then
                prevflag = True
                IngredientIDData.Text = tempid
            Exit While
            End If
        End While
        reader.Close()
        If prevflag = False Then
            prevflag = True
            getPreviousRecord(count + 1)
        Else
            Exit While
        End If
    End While
    If prevflag = False Then
        IngredientIDData.Text = 0
    End If
End Sub

```

```

        End If
    End Sub
    Protected Sub CancelButton_Click(sender As Object, e As EventArgs) Handles
CancelButton.Click
        displayInformation(-1)
        CancelButton.Visible = False
        NewIngredient.Visible = True
        DeleteIngredient.Visible = True
    End Sub
End Class

```

8.3 ASPX Code

```

<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Edit_Ingredients.aspx.vb"
Inherits="Edit_Ingredients" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
    <title>Edit Ingredients</title>
</head>
<body>
    <form id="Edit_Ingredients" runat="server">
        <table style="margin:auto;width:27%;margin-top:14%;text-align:left">
            <tr>
                <td align="left">
                    <asp:Label ID="IngredientIDLabel" runat="server" Text="Ingredient ID:">
</asp:Label>
                    <asp:Label ID="IngredientIDData" runat="server">
</asp:Label>
                </td>
                <td align="right" rowspan="3">
                    <asp:Button ID="NewIngredient" runat="server" Text="New&#13;Ingredient"
Width="100px"/>
                    <br />
                    <br />
                    <asp:Button ID="DeleteIngredient" runat="server"
Text="Delete&#13;Ingredient" Width="100px"/>
                </td>
            </tr>
            <tr>
                <td align="left">
                    <asp:Label ID="IngredientNameLabel" runat="server" Text="Name:">
</asp:Label>
                    <asp:TextBox ID="IngredientNameData" runat="server"
Width="80px"></asp:TextBox>
                </td>
            </tr>
            <tr>
                <td align="left">
                    <asp:Label ID="CostLabel" runat="server" Text="Cost: Rp. "></asp:Label>
                    <asp:TextBox ID="CostInput" runat="server" Width="60px"></asp:TextBox>
                    &nbsp;
                    <asp:Button ID="Save" runat="server" Text="Save" />
                </td>
                <td align="center">

```

[illegible]

9. Reports Page

9.1 Page Design



9.2 ASPX Code

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Reports.aspx.vb"
Inherits="Reports" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Reports</title>
</head>
<body>
    <form id="Reports" runat="server">
<table style="margin:auto;width:50%;text-align:center;margin-top:8%"
cellspacing="0px">
    <tr>
        <td align="center" colspan="7">
            <asp:Image runat="server" ImageUrl="~/logo.PNG" Width="20%" />
        </td>
    </tr>
    <tr>
        <td colspan="7">
            &nbsp;
        </td>
    </tr>
    <tr>
        <td>
            <asp:Button ID="DailyReportButton" runat="server" Text="Daily Report"
Width="120px" height="50px" PostBackUrl="~/Daily_Report.aspx"/>
        </td>
        <td>
            &nbsp;
        </td>
        <td>
            <asp:Button ID="MonthlyReportButton" runat="server" Text="Monthly
Report" Width="120px" height="50px" PostBackUrl="~/Monthly_Report.aspx"/>
        </td>
    </tr>
    <tr>
        <td colspan="7">
            <asp:Button ID="YearlyReportButton" runat="server" Text="Yearly Report"
Width="120px" height="50px" PostBackUrl="~/Yearly_Report.aspx"/>
        </td>
    </tr>
    <tr>
        <td colspan="7">
            <asp:Button ID="AllTimeReportButton" runat="server" Text="All Time Report"
Width="120px" height="50px" PostBackUrl="~/AllTime_Report.aspx"/>
        </td>
    </tr>
    <tr>
        <td colspan="7">
            <asp:Button ID="BackToHomeButton" runat="server" Text="Back To Home"
Width="120px" height="50px" PostBackUrl="~/Home.aspx"/>
        </td>
    </tr>
</table>
    </form>
</body>
</html>
```

```

        </td>
        <td>
            &nbsp;
        </td>
        <td>
            <asp:Button ID="YearlyReportButton" runat="server" Text="Yearly Report"
Width="120px" height="50px" PostBackUrl="~/Yearly_Report.aspx"/>
        </td>
        <td>
            &nbsp;
        </td>
        <td>
            <asp:Button ID="AllTimeReportButton" runat="server" Text="All Time
Report" Width="120px" height="50px" PostBackUrl="~/AllTime_Report.aspx"/>
        </td>
    </tr>
    <tr>
        <td colspan="7">
            &nbsp;
        </td>
    </tr>
    <tr>
        <td colspan="6" style="height:50px">
            &nbsp;
        </td>
        <td align="center">
            <asp:Button ID="HomeButton" runat="server" Text="Back To Home"
Width="120px" height="30px" PostBackUrl="~/home.aspx"/>
        </td>
    </tr>
</table>

</form>
</body>
</html>

```

10. Daily Report Page

10.1 Page Design

Daily Report	
Top Customers of the Day	Top Selling Products of the Day
Total Revenue: Rp.	Total Cost: Rp.
Total Profits: Rp.	Back to Reports

Date:

10.2 Visual Basic Code

```
Partial Class Daily_Report
    Inherits System.Web.UI.Page
    Public Function sortTopCust() As String(,)
        Dim topcust(4, 1) As String
        Dim total(getMaxCustID()), totrevenue As Double
        Dim max, custid As Integer
        Dim reader1 As Data.IDataReader =
CType(FilteredOrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader1.Read()
            custid = reader1("Customer_ID")
            For count = 1 To getMaxCustID()
                If custid = count Then

FilteredProductsOfOrdersDataSource.SelectParameters("orderid").DefaultValue =
reader1("Order_ID")
                Dim reader2 As Data.IDataReader =
CType(FilteredProductsOfOrdersDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
                While reader2.Read()

FilteredProductListDataSource.SelectParameters("productid").DefaultValue =
reader2("Product_ID")
                Dim reader3 As Data.IDataReader =
CType(FilteredProductListDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
                reader3.Read()
                total(count) = total(count) + CInt(reader2("Amount")) *
CDBl(reader3("Price"))
                reader3.Close()
            End While
            reader2.Close()
        End If
    Next
End Function
```

```

End While
reader1.Close()
For i = 1 To getMaxCustID()
    totrevenue = totrevenue + total(i)
Next
TotalRevenueData.Text = totrevenue
For i = 0 To 4
    max = 0
    For j = 1 To getMaxCustID()
        If total(j) > total(max) Then
            max = j
        End If
    Next
    topcust(i, 0) = max
    total(max) = 0
Next
For i = 0 To 4
    Dim reader4 As Data.IDataReader =
CType(CustInfoDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader4.Read()
        If topcust(i, 0) = reader4("Customer_ID") Then
            topcust(i, 1) = reader4("Customer_Name")
            Exit While
        End If
    End While
    reader4.Close()
Next
Return topcust
End Function
Public Sub refreshReport()
    TopCust1.Text = "1. " & sortTopCust()(0, 1)
    TopCust2.Text = "2. " & sortTopCust()(1, 1)
    TopCust3.Text = "3. " & sortTopCust()(2, 1)
    TopCust4.Text = "4. " & sortTopCust()(3, 1)
    TopCust5.Text = "5. " & sortTopCust()(4, 1)
    TopProduct1.Text = "1. " & sortTopProduct()(0, 1)
    TopProduct2.Text = "2. " & sortTopProduct()(1, 1)
    TopProduct3.Text = "3. " & sortTopProduct()(2, 1)
    TopProduct4.Text = "4. " & sortTopProduct()(3, 1)
    TopProduct5.Text = "5. " & sortTopProduct()(4, 1)
End Sub
Public Function getMaxOrderID() As Integer
    Dim maxid, temp As Integer
    maxid = 0
    Dim reader As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        temp = reader("Order_ID")
        If maxid < temp Then
            maxid = temp
        End If
    End While
    reader.Close()
    Return maxid
End Function
Public Function getMaxCustID() As Integer
    Dim maxid, temp As Integer
    maxid = 0

```

```

        Dim reader As Data.IDataReader =
CType(CustInfoDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Customer_ID")
            If maxid < temp Then
                maxid = temp
            End If
        End While
        reader.Close()
        Return maxid
    End Function
    Public Function getMaxProductID() As Integer
        Dim maxid, temp As Integer
        maxid = 0
        Dim reader As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Product_ID")
            If maxid < temp Then
                maxid = temp
            End If
        End While
        reader.Close()
        Return maxid
    End Function
    Public Function sortTopProduct() As String(,)
        Dim totcost As Double
        Dim topproduct(4, 1) As String
        Dim amount(getMaxProductID()), max, productid As Integer
        Dim reader1 As Data.IDataReader =
CType(FilteredOrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader1.Read()
            FilteredProductsOfOrdersDataSource.SelectParameters("orderid").DefaultValue =
reader1("Order_ID")
            Dim reader2 As Data.IDataReader =
CType(FilteredProductsOfOrdersDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
            While reader2.Read()
                productid = reader2("Product_ID")
                amount(productid) = amount(productid) + reader2("amount")
            End While
            reader2.Close()
        End While
        reader1.Close()
        For i = 1 To getMaxProductID()

FilteredIngredientsNeededDataSource.SelectParameters("productid").DefaultValue = i
            Dim reader3 As Data.IDataReader =
CType(FilteredIngredientsNeededDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
            While reader3.Read()

FilteredIngredientListDataSource.SelectParameters("ingredientid").DefaultValue =
reader3("Ingredient_ID")
                Dim reader5 As Data.IDataReader =
CType(FilteredIngredientListDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
                reader5.Read()

```

```

        totcost = totcost + amount(i) * (reader3("Amount_Needed")) *
reader5("Cost"))
        reader5.Close()
    End While
    reader3.Close()
Next
TotalCostData.Text = totcost
For i = 0 To 4
    max = 0
    For j = 1 To getMaxProductID()
        If amount(j) > amount(max) Then
            max = j
        End If
    Next
    topproduct(i, 0) = max
    amount(max) = 0
Next
For i = 0 To 4
    Dim reader4 As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader4.Read()
        If topproduct(i, 0) = reader4("Product_ID") Then
            topproduct(i, 1) = reader4("Product_Name")
            Exit While
        End If
    End While
    reader4.Close()
Next
Return topproduct
End Function
Protected Sub DateFilter_SelectedIndexChanged(sender As Object, e As EventArgs)
Handles DateFilter.SelectedIndexChanged
    refreshReport()
    TotalProfitsData.Text = CDb1(TotalRevenueData.Text) - CDb1(TotalCostData.Text)
End Sub
End Class

```

10.3 ASPX Code

```

<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Daily_Report.aspx.vb"
Inherits="Daily_Report" %>

<%@ Register assembly="AjaxControlToolkit" namespace="AjaxControlToolkit"
tagprefix="ajaxToolkit" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Daily Report</title>
</head>
<body>
    <style>
        td {border: 1px solid black;padding:1%}
    </style>
    <form id="form1" runat="server">

```

```

<table style="margin:auto; width:50%; margin-top:10%; text-align:left; border-
collapse:collapse" >
    <tr>
        <th colspan="2" style="text-align:center; padding-bottom:2%">
            <asp:Label ID="TitleHeading" runat="server" Text="Daily Report"></asp:Label>
        </th>
    </tr>
    <tr>
        <td style="text-align:center">
            <asp:Label ID="TopCustomersHeading" runat="server" Text="Top Customers &#xD;
of the Day"></asp:Label>
        </td>
        <td style="text-align:center">
            <asp:Label ID="TopProductsHeading" runat="server" Text="Top Selling Products
&#xD; of the Day"></asp:Label>
        </td>
        <td style="border:none; padding-left:2%">
            <asp:Label ID="DateFilterLabel" runat="server" Text="Date:"></asp:Label>
            <br />
            <ajaxToolkit:ComboBox ID="DateFilter" runat="server"
AutoCompleteMode="SuggestAppend" AutoPostBack="True" DataSourceID="DateDataSource"
DataTextField="Date_of_Order" DataValueField="Date_of_Order"
DropDownStyle="DropDownList" MaxLength="0" style="display: inline"
DataTextFormatString="{0:d}" Width="100px" BorderWidth="0px">
            </ajaxToolkit:ComboBox>
        </td>
    </tr>
    <tr>
        <td>
            <asp:Label ID="TopCust1" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopCust2" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopCust3" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopCust4" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopCust5" runat="server" Text=""></asp:Label>
        </td>
        <td>
            <asp:Label ID="TopProduct1" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopProduct2" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopProduct3" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopProduct4" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopProduct5" runat="server" Text=""></asp:Label>
        </td>
    </tr>
    <tr>
        <td style="border:none">
            <asp:Label ID="TotalRevenueLabel" runat="server" Text="Total Revenue: Rp.
"></asp:Label>
            <asp:Label ID="TotalRevenueData" runat="server" Text=""></asp:Label>
        </td>
        <td style="border:none">

```

```

        <asp:Label ID="TotalCostLabel" runat="server" Text="Total Cost: Rp.
"></asp:Label>
        <asp:Label ID="TotalCostData" runat="server" Text=""></asp:Label>
    </td>
</tr>
<tr>
    <td colspan="2" style="border:none">
        <asp:Label ID="TotalProfitsLabel" runat="server" Text="Total Profits: Rp.
"></asp:Label>
        <asp:Label ID="TotalProfitsData" runat="server" Text=""></asp:Label>
    </td>
    <td align="right" style="border:none">
        <asp:Button ID="Home" runat="server" Text="Back to Reports"
PostBackUrl="~/Reports.aspx" />
    </td>
</tr>
</table>

    <asp:ScriptManager ID="ScriptManager1" runat="server">
    </asp:ScriptManager>

    <asp:AccessDataSource ID="FilteredOrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Orders] WHERE Date_of_Order = @date">
    <SelectParameters>
        <asp:ControlParameter ControlID="DateFilter" PropertyName="SelectedValue"
Name="@date" />
    </SelectParameters>
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="DateDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT DISTINCT Date_of_Order FROM [Orders]">
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="CustInfoDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Customer_Information]">
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="FilteredProductsOfOrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Products_of_Orders] WHERE Order_ID = @orderid">
    <SelectParameters>
        <asp:Parameter Name="orderid" DefaultValue="" />
    </SelectParameters>
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="FilteredProductListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Product_List] WHERE Product_ID = @productid">
    <SelectParameters>
        <asp:Parameter Name="productid" DefaultValue="" />
    </SelectParameters>
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="ProductListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Product_List]">

```



```

        </asp:AccessDataSource>

        <asp:AccessDataSource ID="OrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Orders]">
        </asp:AccessDataSource>

        <asp:AccessDataSource ID="FilteredIngredientsNeededDataSource"
runat="server" DataFile="~/App_Data/Computer Science IA.mdb"
DataSourceMode="DataReader" SelectCommand="SELECT * FROM [Ingredients_Needed] WHERE
Product_ID = @productid">
        <SelectParameters>
        <asp:Parameter Name="productid" DefaultValue="" />
        </SelectParameters>
        </asp:AccessDataSource>

        <asp:AccessDataSource ID="FilteredIngredientListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Ingredient_List] WHERE Ingredient_ID = @ingredientid">
        <SelectParameters>
        <asp:Parameter Name="ingredientid" DefaultValue="" />
        </SelectParameters>
        </asp:AccessDataSource>

    </form>
</body>
</html>

```

11. Monthly Report Page

11.1 Page Design

Monthly Report	
Top Customers of the Month	Top Selling Products of the Month
Total Revenue: Rp.	Total Cost: Rp.
Total Profits: Rp.	

Month:

Year:

[Back to Reports](#)

11.2 Visual Basic Code

```
Partial Class Monthly_Report
    Inherits System.Web.UI.Page
    Public Function sortTopCust() As String(,)
        Dim topcust(4, 1) As String
        Dim total(getMaxCustID()), totrevenue As Double
        Dim max, custid As Integer
        Dim reader1 As Data.IDataReader =
CType(FilteredOrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader1.Read()
            custid = reader1("Customer_ID")
            For count = 1 To getMaxCustID()
                If custid = count Then

FilteredProductsOfOrdersDataSource.SelectParameters("orderid").DefaultValue =
reader1("Order_ID")
                Dim reader2 As Data.IDataReader =
CType(FilteredProductsOfOrdersDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
                While reader2.Read()

FilteredProductListDataSource.SelectParameters("productid").DefaultValue =
reader2("Product_ID")
                Dim reader3 As Data.IDataReader =
CType(FilteredProductListDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
                reader3.Read()
                total(count) = total(count) + CInt(reader2("Amount")) *
CDBl(reader3("Price"))
                reader3.Close()
            End While
            reader2.Close()
        End If
    Next
End While
```

```

reader1.Close()
For i = 1 To getMaxCustID()
    totrevenue = totrevenue + total(i)
Next
TotalRevenueData.Text = totrevenue
For i = 0 To 4
    max = 0
    For j = 1 To getMaxCustID()
        If total(j) > total(max) Then
            max = j
        End If
    Next
    topcust(i, 0) = max
    total(max) = 0
Next
For i = 0 To 4
    Dim reader4 As Data.IDataReader =
CType(CustInfoDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader4.Read()
        If topcust(i, 0) = reader4("Customer_ID") Then
            topcust(i, 1) = reader4("Customer_Name")
            Exit While
        End If
    End While
    reader4.Close()
Next
Return topcust
End Function
Public Sub refreshReport()
    TopCust1.Text = "1. " & sortTopCust()(0, 1)
    TopCust2.Text = "2. " & sortTopCust()(1, 1)
    TopCust3.Text = "3. " & sortTopCust()(2, 1)
    TopCust4.Text = "4. " & sortTopCust()(3, 1)
    TopCust5.Text = "5. " & sortTopCust()(4, 1)
    TopProduct1.Text = "1. " & sortTopProduct()(0, 1)
    TopProduct2.Text = "2. " & sortTopProduct()(1, 1)
    TopProduct3.Text = "3. " & sortTopProduct()(2, 1)
    TopProduct4.Text = "4. " & sortTopProduct()(3, 1)
    TopProduct5.Text = "5. " & sortTopProduct()(4, 1)
End Sub
Public Function getMaxOrderID() As Integer
    Dim maxid, temp As Integer
    maxid = 0
    Dim reader As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        temp = reader("Order_ID")
        If maxid < temp Then
            maxid = temp
        End If
    End While
    reader.Close()
    Return maxid
End Function
Public Function getMaxCustID() As Integer
    Dim maxid, temp As Integer
    maxid = 0

```

```

        Dim reader As Data.IDataReader =
CType(CustInfoDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Customer_ID")
            If maxid < temp Then
                maxid = temp
            End If
        End While
        reader.Close()
        Return maxid
    End Function
    Public Function getMaxProductID() As Integer
        Dim maxid, temp As Integer
        maxid = 0
        Dim reader As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Product_ID")
            If maxid < temp Then
                maxid = temp
            End If
        End While
        reader.Close()
        Return maxid
    End Function
    Public Function sortTopProduct() As String(,)
        Dim totcost As Double
        Dim topproduct(4, 1) As String
        Dim amount(getMaxProductID()), max, productid As Integer
        Dim reader1 As Data.IDataReader =
CType(FilteredOrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader1.Read()
            FilteredProductsOfOrdersDataSource.SelectParameters("orderid").DefaultValue =
reader1("Order_ID")
            Dim reader2 As Data.IDataReader =
CType(FilteredProductsOfOrdersDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
            While reader2.Read()
                productid = reader2("Product_ID")
                amount(productid) = amount(productid) + reader2("amount")
            End While
            reader2.Close()
        End While
        reader1.Close()
        For i = 1 To getMaxProductID()

FilteredIngredientsNeededDataSource.SelectParameters("productid").DefaultValue = i
            Dim reader3 As Data.IDataReader =
CType(FilteredIngredientsNeededDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
            While reader3.Read()

FilteredIngredientListDataSource.SelectParameters("ingredientid").DefaultValue =
reader3("Ingredient_ID")
                Dim reader5 As Data.IDataReader =
CType(FilteredIngredientListDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
                reader5.Read()

```

```

        totcost = totcost + amount(i) * (reader3("Amount_Needed")) *
reader5("Cost"))
        reader5.Close()
    End While
    reader3.Close()
Next
TotalCostData.Text = totcost
For i = 0 To 4
    max = 0
    For j = 1 To getMaxProductID()
        If amount(j) > amount(max) Then
            max = j
        End If
    Next
    topproduct(i, 0) = max
    amount(max) = 0
Next
For i = 0 To 4
    Dim reader4 As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader4.Read()
        If topproduct(i, 0) = reader4("Product_ID") Then
            topproduct(i, 1) = reader4("Product_Name")
            Exit While
        End If
    End While
    reader4.Close()
Next
Return topproduct
End Function
Protected Sub MonthFilter_SelectedIndexChanged(sender As Object, e As EventArgs)
Handles MonthFilter.SelectedIndexChanged
    If YearFilter.Text <> "" Then
        refreshReport()
        TotalProfitsData.Text = CDb1(TotalRevenueData.Text) -
CDbl(TotalCostData.Text)
    End If
End Sub
Protected Sub YearFilter_SelectedIndexChanged(sender As Object, e As EventArgs)
Handles YearFilter.SelectedIndexChanged
    refreshReport()
    TotalProfitsData.Text = CDb1(TotalRevenueData.Text) - CDb1(TotalCostData.Text)
End Sub
End Class

```

11.3 ASPX Code

```

<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Monthly_Report.aspx.vb"
Inherits="Monthly_Report" %>

<%@ Register assembly="AjaxControlToolkit" namespace="AjaxControlToolkit"
tagprefix="ajaxToolkit" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">

```

```

<head runat="server">
    <title>Monthly Report</title>
</head>
<body>
    <style>
        td {border: 1px solid black;padding:1%}
    </style>
    <form id="form1" runat="server">
<table style="margin:auto;width:50%;margin-top:10%;text-align:left;border-
collapse:collapse" >
    <tr>
        <th colspan="2" style="text-align:center; padding-bottom:2%">
            <asp:Label ID="TitleHeading" runat="server" Text="Monthly
Report"></asp:Label>
        </th>
    </tr>
    <tr>
        <td style="text-align:center">
            <asp:Label ID="TopCustomersHeading" runat="server" Text="Top Customers
of the Month"></asp:Label>
        </td>
        <td style="text-align:center">
            <asp:Label ID="TopProductsHeading" runat="server" Text="Top Selling Products
of the Month"></asp:Label>
        </td>
        <td style="border:none;padding-left:2%" rowspan="2">
            <asp:Label ID="MonthFilterLabel" runat="server" Text="Month:"></asp:Label>
            <br />
            <ajaxToolkit:ComboBox ID="MonthFilter" runat="server"
AutoCompleteMode="SuggestAppend" AutoPostBack="True" DropDownStyle="DropDownList"
MaxLength="0" style="display: inline;" DataTextFormatString="{0:d}" Width="80px"
BorderWidth="0px">
                <asp:ListItem Value="1">January</asp:ListItem>
                <asp:ListItem Value="2">February</asp:ListItem>
                <asp:ListItem Value="3">March</asp:ListItem>
                <asp:ListItem Value="4">April</asp:ListItem>
                <asp:ListItem Value="5">May</asp:ListItem>
                <asp:ListItem Value="6">June</asp:ListItem>
                <asp:ListItem Value="7">July</asp:ListItem>
                <asp:ListItem Value="8">August</asp:ListItem>
                <asp:ListItem Value="9">September</asp:ListItem>
                <asp:ListItem Value="10">October</asp:ListItem>
                <asp:ListItem Value="11">November</asp:ListItem>
                <asp:ListItem Value="12">December</asp:ListItem>
            </ajaxToolkit:ComboBox>
            <br />
            <br />
            <asp:Label ID="YearFilterLabel" runat="server" Text="Year:"></asp:Label>
            <br />
            <ajaxToolkit:ComboBox ID="YearFilter" runat="server" AutoPostBack="True"
DataSourceID="YearDataSource" DataTextField="Expr1000" DataValueField="Expr1000"
MaxLength="0" style="display: inline;" Width="60px" BorderWidth="0px">
                </ajaxToolkit:ComboBox>
        </td>
    </tr>
    <tr>
        <td>
            <asp:Label ID="TopCust1" runat="server" Text=""></asp:Label>

```

```

<br />
<asp:Label ID="TopCust2" runat="server" Text=""></asp:Label>
<br />
<asp:Label ID="TopCust3" runat="server" Text=""></asp:Label>
<br />
<asp:Label ID="TopCust4" runat="server" Text=""></asp:Label>
<br />
<asp:Label ID="TopCust5" runat="server" Text=""></asp:Label>
</td>
<td>
<asp:Label ID="TopProduct1" runat="server" Text=""></asp:Label>
<br />
<asp:Label ID="TopProduct2" runat="server" Text=""></asp:Label>
<br />
<asp:Label ID="TopProduct3" runat="server" Text=""></asp:Label>
<br />
<asp:Label ID="TopProduct4" runat="server" Text=""></asp:Label>
<br />
<asp:Label ID="TopProduct5" runat="server" Text=""></asp:Label>
</td>
</tr>
<tr>
<td style="border:none">
<asp:Label ID="TotalRevenueLabel" runat="server" Text="Total Revenue: Rp.
"></asp:Label>
<asp:Label ID="TotalRevenueData" runat="server" Text=""></asp:Label>
</td>
<td style="border:none">
<asp:Label ID="TotalCostLabel" runat="server" Text="Total Cost: Rp.
"></asp:Label>
<asp:Label ID="TotalCostData" runat="server" Text=""></asp:Label>
</td>
</tr>
<tr>
<td colspan="2" style="border:none">
<asp:Label ID="TotalProfitsLabel" runat="server" Text="Total Profits: Rp.
"></asp:Label>
<asp:Label ID="TotalProfitsData" runat="server" Text=""></asp:Label>
</td>
<td align="right" style="border:none">
<asp:Button ID="Home" runat="server" Text="Back to Reports"
PostBackUrl="~/Reports.aspx" />
</td>
</tr>
</table>
<asp:ScriptManager ID="ScriptManager1" runat="server">
</asp:ScriptManager>

<asp:AccessDataSource ID="FilteredOrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Orders] WHERE (MONTH(Date_of_Order) = @month AND
YEAR(Date_of_Order) = @year)">
<SelectParameters>
<asp:ControlParameter ControlID="MonthFilter" PropertyName="SelectedValue"
Name="@month" />
<asp:ControlParameter ControlID="YearFilter" PropertyName="Text"
Name="@year" />
</SelectParameters>

```

```

        </asp:AccessDataSource>

        <asp:AccessDataSource ID="CustInfoDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Customer_Information]">
        </asp:AccessDataSource>

        <asp:AccessDataSource ID="FilteredProductsOfOrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Products_of_Orders] WHERE Order_ID = @orderid">
        <SelectParameters>
            <asp:Parameter Name="orderid" DefaultValue="" />
        </SelectParameters>
        </asp:AccessDataSource>

        <asp:AccessDataSource ID="FilteredProductListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Product_List] WHERE Product_ID = @productid">
        <SelectParameters>
            <asp:Parameter Name="productid" DefaultValue="" />
        </SelectParameters>
        </asp:AccessDataSource>

        <asp:AccessDataSource ID="ProductListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Product_List]">
        </asp:AccessDataSource>

        <asp:AccessDataSource ID="OrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Orders]">
        </asp:AccessDataSource>

        <asp:AccessDataSource ID="FilteredIngredientsNeededDataSource"
runat="server" DataFile="~/App_Data/Computer Science IA.mdb"
DataSourceMode="DataReader" SelectCommand="SELECT * FROM [Ingredients_Needed] WHERE
Product_ID = @productid">
        <SelectParameters>
            <asp:Parameter Name="productid" DefaultValue="" />
        </SelectParameters>
        </asp:AccessDataSource>

        <asp:AccessDataSource ID="FilteredIngredientListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Ingredient_List] WHERE Ingredient_ID = @ingredientid">
        <SelectParameters>
            <asp:Parameter Name="ingredientid" DefaultValue="" />
        </SelectParameters>
        </asp:AccessDataSource>

        <asp:AccessDataSource ID="YearDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT DISTINCT YEAR(Date_of_Order) FROM [Orders]">
        </asp:AccessDataSource>
    </form>
</body>
</html>

```


12. Yearly Report Page

12.1 Page Design

Yearly Report	
Top Customers of the Year	Top Selling Products of the Year
Total Revenue: Rp.	Total Cost: Rp.
Total Profits: Rp.	Back to Reports

Year:

▼

12.2 Visual Basic Code

```
Partial Class Yearly_Report
    Inherits System.Web.UI.Page
    Public Function sortTopCust() As String(,)
        Dim topcust(4, 1) As String
        Dim total(getMaxCustID()), totrevenue As Double
        Dim max, custid As Integer
        Dim reader1 As Data.IDataReader =
CType(FilteredOrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader1.Read()
            custid = reader1("Customer_ID")
            For count = 1 To getMaxCustID()
                If custid = count Then

FilteredProductsOfOrdersDataSource.SelectParameters("orderid").DefaultValue =
reader1("Order_ID")
                Dim reader2 As Data.IDataReader =
CType(FilteredProductsOfOrdersDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
                While reader2.Read()

FilteredProductListDataSource.SelectParameters("productid").DefaultValue =
reader2("Product_ID")
                Dim reader3 As Data.IDataReader =
CType(FilteredProductListDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
                reader3.Read()
                total(count) = total(count) + CInt(reader2("Amount")) *
CDBl(reader3("Price"))
                reader3.Close()
            End While
            reader2.Close()
        End If
    End Function
End Class
```

```

        Next
    End While
    reader1.Close()
    For i = 1 To getMaxCustID()
        totrevenue = totrevenue + total(i)
    Next
    TotalRevenueData.Text = totrevenue
    For i = 0 To 4
        max = 0
        For j = 1 To getMaxCustID()
            If total(j) > total(max) Then
                max = j
            End If
        Next
        topcust(i, 0) = max
        total(max) = 0
    Next
    For i = 0 To 4
        Dim reader4 As Data.IDataReader =
CType(CustInfoDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader4.Read()
            If topcust(i, 0) = reader4("Customer_ID") Then
                topcust(i, 1) = reader4("Customer_Name")
                Exit While
            End If
        End While
        reader4.Close()
    Next
    Return topcust
End Function
Public Sub refreshReport()
    TopCust1.Text = "1. " & sortTopCust()(0, 1)
    TopCust2.Text = "2. " & sortTopCust()(1, 1)
    TopCust3.Text = "3. " & sortTopCust()(2, 1)
    TopCust4.Text = "4. " & sortTopCust()(3, 1)
    TopCust5.Text = "5. " & sortTopCust()(4, 1)
    TopProduct1.Text = "1. " & sortTopProduct()(0, 1)
    TopProduct2.Text = "2. " & sortTopProduct()(1, 1)
    TopProduct3.Text = "3. " & sortTopProduct()(2, 1)
    TopProduct4.Text = "4. " & sortTopProduct()(3, 1)
    TopProduct5.Text = "5. " & sortTopProduct()(4, 1)
End Sub
Public Function getMaxOrderID() As Integer
    Dim maxid, temp As Integer
    maxid = 0
    Dim reader As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        temp = reader("Order_ID")
        If maxid < temp Then
            maxid = temp
        End If
    End While
    reader.Close()
    Return maxid
End Function
Public Function getMaxCustID() As Integer
    Dim maxid, temp As Integer

```

```

        maxid = 0
        Dim reader As Data.IDataReader =
CType(CustInfoDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Customer_ID")
            If maxid < temp Then
                maxid = temp
            End If
        End While
        reader.Close()
        Return maxid
    End Function
    Public Function getMaxProductID() As Integer
        Dim maxid, temp As Integer
        maxid = 0
        Dim reader As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Product_ID")
            If maxid < temp Then
                maxid = temp
            End If
        End While
        reader.Close()
        Return maxid
    End Function
    Public Function sortTopProduct() As String(,)
        Dim totcost As Double
        Dim topproduct(4, 1) As String
        Dim amount(getMaxProductID()), max, productid As Integer
        Dim reader1 As Data.IDataReader =
CType(FilteredOrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader1.Read()
            FilteredProductsOfOrdersDataSource.SelectParameters("orderid").DefaultValue =
reader1("Order_ID")
            Dim reader2 As Data.IDataReader =
CType(FilteredProductsOfOrdersDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
            While reader2.Read()
                productid = reader2("Product_ID")
                amount(productid) = amount(productid) + reader2("amount")
            End While
            reader2.Close()
        End While
        reader1.Close()
        For i = 1 To getMaxProductID()

FilteredIngredientsNeededDataSource.SelectParameters("productid").DefaultValue = i
            Dim reader3 As Data.IDataReader =
CType(FilteredIngredientsNeededDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
            While reader3.Read()

FilteredIngredientListDataSource.SelectParameters("ingredientid").DefaultValue =
reader3("Ingredient_ID")
                Dim reader5 As Data.IDataReader =
CType(FilteredIngredientListDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)

```

```

        reader5.Read()
        totcost = totcost + amount(i) * (reader3("Amount_Needed") *
reader5("Cost"))
        reader5.Close()
    End While
    reader3.Close()
Next
TotalCostData.Text = totcost
For i = 0 To 4
    max = 0
    For j = 1 To getMaxProductID()
        If amount(j) > amount(max) Then
            max = j
        End If
    Next
    topproduct(i, 0) = max
    amount(max) = 0
Next
For i = 0 To 4
    Dim reader4 As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader4.Read()
        If topproduct(i, 0) = reader4("Product_ID") Then
            topproduct(i, 1) = reader4("Product_Name")
            Exit While
        End If
    End While
    reader4.Close()
Next
Return topproduct
End Function
Protected Sub YearFilter_SelectedIndexChanged(sender As Object, e As EventArgs)
Handles YearFilter.SelectedIndexChanged
    refreshReport()
    TotalProfitsData.Text = CDb1(TotalRevenueData.Text) - CDb1(TotalCostData.Text)
End Sub
End Class

```

12.3 ASPX Code

```

<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Yearly_Report.aspx.vb"
Inherits="Yearly_Report" %>

<%@ Register assembly="AjaxControlToolkit" namespace="AjaxControlToolkit"
tagprefix="ajaxToolkit" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Yearly Report</title>
</head>
<body>
    <style>
        td {border: 1px solid black;padding:1%}
    </style>

```

```

    <form id="form1" runat="server">
<table style="margin:auto; width:50%; margin-top:10%; text-align:left; border-
collapse:collapse" >
    <tr>
        <th colspan="2" style="text-align:center; padding-bottom:2%">
            <asp:Label ID="TitleHeading" runat="server" Text="Yearly
Report"></asp:Label>
        </th>
    </tr>
    <tr>
        <td style="text-align:center">
            <asp:Label ID="TopCustomersHeading" runat="server" Text="Top Customers
of the Year"></asp:Label>
        </td>
        <td style="text-align:center">
            <asp:Label ID="TopProductsHeading" runat="server" Text="Top Selling Products
of the Year"></asp:Label>
        </td>
        <td style="border:none; padding-left:2%">
            <asp:Label ID="YearFilterLabel" runat="server" Text="Year:"></asp:Label>
            <br />
            <ajaxToolkit:ComboBox ID="YearFilter" runat="server" AutoPostBack="True"
DataSourceID="YearDataSource" DataTextField="Expr1000" DataValueField="Expr1000"
MaxLength="0" style="display: inline;" Width="60px" BorderWidth="0px">
            </ajaxToolkit:ComboBox>
        </td>
    </tr>
    <tr>
        <td>
            <asp:Label ID="TopCust1" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopCust2" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopCust3" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopCust4" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopCust5" runat="server" Text=""></asp:Label>
        </td>
        <td>
            <asp:Label ID="TopProduct1" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopProduct2" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopProduct3" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopProduct4" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopProduct5" runat="server" Text=""></asp:Label>
        </td>
    </tr>
    <tr>
        <td style="border:none">
            <asp:Label ID="TotalRevenueLabel" runat="server" Text="Total Revenue: Rp.
"></asp:Label>
            <asp:Label ID="TotalRevenueData" runat="server" Text=""></asp:Label>
        </td>
        <td style="border:none">

```

```

        <asp:Label ID="TotalCostLabel" runat="server" Text="Total Cost: Rp.
"></asp:Label>
        <asp:Label ID="TotalCostData" runat="server" Text=""></asp:Label>
    </td>
</tr>
<tr>
    <td colspan="2" style="border:none">
        <asp:Label ID="TotalProfitsLabel" runat="server" Text="Total Profits: Rp.
"></asp:Label>
        <asp:Label ID="TotalProfitsData" runat="server" Text=""></asp:Label>
    </td>
    <td align="right" style="border:none">
        <asp:Button ID="Home" runat="server" Text="Back to Reports"
PostBackUrl="~/Reports.aspx" />
    </td>
</tr>
</table>

    <asp:ScriptManager ID="ScriptManager1" runat="server">
    </asp:ScriptManager>

    <asp:AccessDataSource ID="FilteredOrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Orders] WHERE (YEAR(Date_of_Order) = @year)">
    <SelectParameters>
        <asp:ControlParameter ControlID="YearFilter" PropertyName="Text"
Name="@year" />
    </SelectParameters>
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="CustInfoDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Customer_Information]">
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="FilteredProductsOfOrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Products_of_Orders] WHERE Order_ID = @orderid">
    <SelectParameters>
        <asp:Parameter Name="orderid" DefaultValue="" />
    </SelectParameters>
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="FilteredProductListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Product_List] WHERE Product_ID = @productid">
    <SelectParameters>
        <asp:Parameter Name="productid" DefaultValue="" />
    </SelectParameters>
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="ProductListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Product_List]">
    </asp:AccessDataSource>

    <asp:AccessDataSource ID="OrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Orders]">

```

```

        </asp:AccessDataSource>

        <asp:AccessDataSource ID="FilteredIngredientsNeededDataSource"
runat="server" DataFile="~/App_Data/Computer Science IA.mdb"
DataSourceMode="DataReader" SelectCommand="SELECT * FROM [Ingredients_Needed] WHERE
Product_ID = @productid">
        <SelectParameters>
        <asp:Parameter Name="productid" DefaultValue="" />
        </SelectParameters>
        </asp:AccessDataSource>

        <asp:AccessDataSource ID="FilteredIngredientListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Ingredient_List] WHERE Ingredient_ID = @ingredientid">
        <SelectParameters>
        <asp:Parameter Name="ingredientid" DefaultValue="" />
        </SelectParameters>
        </asp:AccessDataSource>

        <asp:AccessDataSource ID="YearDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT DISTINCT YEAR(Date_of_Order) FROM [Orders]">
        </asp:AccessDataSource>

    </form>
</body>
</html>

```

13. All Time Report Page

13.1 Page Design

All Time Report	
Top Customers of All Time	Top Selling Products of All Time
1. Customer_Name	1. Product_Name
2.	2.
3.	3.
4.	4.
5.	5.
Total Revenue: Rp. 50000	
Total Cost: Rp. 10	
Total Profits: Rp. 49990	
Back to Reports	

13.2 Visual Basic Code

```
Partial Class AllTime_Report
    Inherits System.Web.UI.Page
    Public Function sortTopCust() As String(,)
        Dim topcust(4, 1) As String
        Dim total(getMaxCustID()), totrevenue As Double
        Dim max, custid As Integer
        Dim reader1 As Data.IDataReader =
CType(FilteredOrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader1.Read()
            custid = reader1("Customer_ID")
            For count = 1 To getMaxCustID()
                If custid = count Then

FilteredProductsOfOrdersDataSource.SelectParameters("orderid").DefaultValue =
reader1("Order_ID")
                Dim reader2 As Data.IDataReader =
CType(FilteredProductsOfOrdersDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
                While reader2.Read()

FilteredProductListDataSource.SelectParameters("productid").DefaultValue =
reader2("Product_ID")
                Dim reader3 As Data.IDataReader =
CType(FilteredProductListDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
                reader3.Read()
                total(count) = total(count) + CInt(reader2("Amount")) *
CDBl(reader3("Price"))
                reader3.Close()
            End While
            reader2.Close()
        End If
    End Function
End Class
```



```

        Next
    End While
    reader1.Close()
    For i = 1 To getMaxCustID()
        totrevenue = totrevenue + total(i)
    Next
    TotalRevenueData.Text = totrevenue
    For i = 0 To 4
        max = 0
        For j = 1 To getMaxCustID()
            If total(j) > total(max) Then
                max = j
            End If
        Next
        topcust(i, 0) = max
        total(max) = 0
    Next
    For i = 0 To 4
        Dim reader4 As Data.IDataReader =
CType(CustInfoDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader4.Read()
            If topcust(i, 0) = reader4("Customer_ID") Then
                topcust(i, 1) = reader4("Customer_Name")
                Exit While
            End If
        End While
        reader4.Close()
    Next
    Return topcust
End Function
Public Sub refreshReport()
    TopCust1.Text = "1. " & sortTopCust()(0, 1)
    TopCust2.Text = "2. " & sortTopCust()(1, 1)
    TopCust3.Text = "3. " & sortTopCust()(2, 1)
    TopCust4.Text = "4. " & sortTopCust()(3, 1)
    TopCust5.Text = "5. " & sortTopCust()(4, 1)
    TopProduct1.Text = "1. " & sortTopProduct()(0, 1)
    TopProduct2.Text = "2. " & sortTopProduct()(1, 1)
    TopProduct3.Text = "3. " & sortTopProduct()(2, 1)
    TopProduct4.Text = "4. " & sortTopProduct()(3, 1)
    TopProduct5.Text = "5. " & sortTopProduct()(4, 1)
End Sub
Public Function getMaxOrderID() As Integer
    Dim maxid, temp As Integer
    maxid = 0
    Dim reader As Data.IDataReader =
CType(OrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader.Read()
        temp = reader("Order_ID")
        If maxid < temp Then
            maxid = temp
        End If
    End While
    reader.Close()
    Return maxid
End Function
Public Function getMaxCustID() As Integer
    Dim maxid, temp As Integer

```

```

        maxid = 0
        Dim reader As Data.IDataReader =
CType(CustInfoDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Customer_ID")
            If maxid < temp Then
                maxid = temp
            End If
        End While
        reader.Close()
        Return maxid
    End Function
    Public Function getMaxProductID() As Integer
        Dim maxid, temp As Integer
        maxid = 0
        Dim reader As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader.Read()
            temp = reader("Product_ID")
            If maxid < temp Then
                maxid = temp
            End If
        End While
        reader.Close()
        Return maxid
    End Function
    Public Function sortTopProduct() As String(,)
        Dim totcost As Double
        Dim topproduct(4, 1) As String
        Dim amount(getMaxProductID()), max, productid As Integer
        Dim reader1 As Data.IDataReader =
CType(FilteredOrdersDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
        While reader1.Read()
            FilteredProductsOfOrdersDataSource.SelectParameters("orderid").DefaultValue =
reader1("Order_ID")
            Dim reader2 As Data.IDataReader =
CType(FilteredProductsOfOrdersDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
            While reader2.Read()
                productid = reader2("Product_ID")
                amount(productid) = amount(productid) + reader2("amount")
            End While
            reader2.Close()
        End While
        reader1.Close()
        For i = 1 To getMaxProductID()

FilteredIngredientsNeededDataSource.SelectParameters("productid").DefaultValue = i
            Dim reader3 As Data.IDataReader =
CType(FilteredIngredientsNeededDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
            While reader3.Read()

FilteredIngredientListDataSource.SelectParameters("ingredientid").DefaultValue =
reader3("Ingredient_ID")

```

```

        Dim reader5 As Data.IDataReader =
CType(FilteredIngredientListDataSource.Select(DataSourceSelectArguments.Empty),
Data.IDataReader)
        reader5.Read()
        totcost = totcost + amount(i) * (reader3("Amount_Needed") *
reader5("Cost"))
        reader5.Close()
    End While
    reader3.Close()
Next
TotalCostData.Text = totcost
For i = 0 To 4
    max = 0
    For j = 1 To getMaxProductID()
        If amount(j) > amount(max) Then
            max = j
        End If
    Next
    topproduct(i, 0) = max
    amount(max) = 0
Next
For i = 0 To 4
    Dim reader4 As Data.IDataReader =
CType(ProductListDataSource.Select(DataSourceSelectArguments.Empty), Data.IDataReader)
    While reader4.Read()
        If topproduct(i, 0) = reader4("Product_ID") Then
            topproduct(i, 1) = reader4("Product_Name")
            Exit While
        End If
    End While
    reader4.Close()
Next
Return topproduct
End Function
Private Sub form1_Load(sender As Object, e As EventArgs) Handles form1.Load
    refreshReport()
    TotalProfitsData.Text = CDb1(TotalRevenueData.Text) - CDb1(TotalCostData.Text)
End Sub
End Class

```

13.3 ASPX Code

```

<%@ Page Language="VB" AutoEventWireup="false" CodeFile="AllTime_Report.aspx.vb"
Inherits="AllTime_Report" %>

<%@ Register assembly="AjaxControlToolkit" namespace="AjaxControlToolkit"
tagprefix="ajaxToolkit" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>All Time Report</title>
</head>
<body>
    <style>
        td {border: 1px solid black;padding:1%}
    </style>

```

```

    <form id="form1" runat="server">
<table style="margin:auto; width:50%; margin-top:10%; text-align:left; border-
collapse:collapse" >
    <tr>
        <th colspan="2" style="text-align:center; padding-bottom:2%">
            <asp:Label ID="TitleHeading" runat="server" Text="All Time
Report"></asp:Label>
        </th>
    </tr>
    <tr>
        <td style="text-align:center">
            <asp:Label ID="TopCustomersHeading" runat="server" Text="Top Customers
of All Time"></asp:Label>
        </td>
        <td style="text-align:center">
            <asp:Label ID="TopProductsHeading" runat="server" Text="Top Selling Products
of All Time"></asp:Label>
        </td>
    </tr>
    <tr>
        <td>
            <asp:Label ID="TopCust1" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopCust2" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopCust3" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopCust4" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopCust5" runat="server" Text=""></asp:Label>
        </td>
        <td>
            <asp:Label ID="TopProduct1" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopProduct2" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopProduct3" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopProduct4" runat="server" Text=""></asp:Label>
            <br />
            <asp:Label ID="TopProduct5" runat="server" Text=""></asp:Label>
        </td>
    </tr>
    <tr>
        <td style="border:none">
            <asp:Label ID="TotalRevenueLabel" runat="server" Text="Total Revenue: Rp.
"></asp:Label>
            <asp:Label ID="TotalRevenueData" runat="server" Text=""></asp:Label>
        </td>
        <td style="border:none">
            <asp:Label ID="TotalCostLabel" runat="server" Text="Total Cost: Rp.
"></asp:Label>
            <asp:Label ID="TotalCostData" runat="server" Text=""></asp:Label>
        </td>
    </tr>
    <tr>
        <td style="border:none">

```

```

        <asp:Label ID="TotalProfitsLabel" runat="server" Text="Total Profits: Rp.
"></asp:Label>
        <asp:Label ID="TotalProfitsData" runat="server" Text=""></asp:Label>
    </td>
    <td align="right" style="border:none">
        <asp:Button ID="Home" runat="server" Text="Back to Reports"
PostBackUrl="~/Reports.aspx" />
    </td>
</tr>
</table>

<asp:ScriptManager ID="ScriptManager1" runat="server">
</asp:ScriptManager>

<asp:AccessDataSource ID="FilteredOrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Orders]">
</asp:AccessDataSource>

<asp:AccessDataSource ID="CustInfoDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Customer_Information]">
</asp:AccessDataSource>

<asp:AccessDataSource ID="FilteredProductsOfOrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Products_of_Orders] WHERE Order_ID = @orderid">
    <SelectParameters>
        <asp:Parameter Name="orderid" DefaultValue="" />
    </SelectParameters>
</asp:AccessDataSource>

<asp:AccessDataSource ID="FilteredProductListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Product_List] WHERE Product_ID = @productid">
    <SelectParameters>
        <asp:Parameter Name="productid" DefaultValue="" />
    </SelectParameters>
</asp:AccessDataSource>

<asp:AccessDataSource ID="ProductListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Product_List]">
</asp:AccessDataSource>

<asp:AccessDataSource ID="OrdersDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Orders]">
</asp:AccessDataSource>

<asp:AccessDataSource ID="FilteredIngredientsNeededDataSource"
runat="server" DataFile="~/App_Data/Computer Science IA.mdb"
DataSourceMode="DataReader" SelectCommand="SELECT * FROM [Ingredients_Needed] WHERE
Product_ID = @productid">
    <SelectParameters>
        <asp:Parameter Name="productid" DefaultValue="" />
    </SelectParameters>
</asp:AccessDataSource>

```

```
        <asp:AccessDataSource ID="FilteredIngredientListDataSource" runat="server"
DataFile="~/App_Data/Computer Science IA.mdb" DataSourceMode="DataReader"
SelectCommand="SELECT * FROM [Ingredient_List] WHERE Ingredient_ID = @ingredientid">
        <SelectParameters>
        <asp:Parameter Name="ingredientid" DefaultValue="" />
        </SelectParameters>
        </asp:AccessDataSource>

    </form>
</body>
</html>
```