

VBA Codes

1. LoadFromDatabase

```
Sub LoadFromDatabase()  
    Dim conn As Object  
    Dim rs As Object  
    Dim ws As Worksheet  
    Dim dbData As String  
    Dim strSQL As String  
    Dim i As Integer  
  
    ' set worksheet  
    Set ws = ThisWorkbook.Sheets("OnlineClothShop")  
  
    ' clear content  
    ws.Range("A4:M105").ClearContents  
    ws.Range("A4:M105").Interior.Color = xlNone  
  
    ' link database  
    dbData = ThisWorkbook.Path & "\\Project2.accdb"  
  
    ' Establish database connection  
    Set conn = CreateObject("ADODB.Connection")  
    conn.Open "Provider=Microsoft.ACE.OLEDB.12.0;Data Source=" & dbData & ";"  
  
    ' SQL query  
    strSQL = "SELECT OrderID, CustomerID, CustomerName, Gender, ProductID, Products,  
SalePrice, UnitCost, OrderDate, Quantity, Profit, City, OrderStatus FROM Data"  
  
    ' Execute the SQL command  
    Set rs = conn.Execute(strSQL)  
  
    ' open Excel  
    i = 4  
    Do Until rs.EOF  
        ws.Cells(i, 1).Value = rs.Fields("OrderID").Value  
        ws.Cells(i, 2).Value = rs.Fields("CustomerID").Value  
        ws.Cells(i, 3).Value = rs.Fields("CustomerName").Value  
        ws.Cells(i, 4).Value = rs.Fields("Gender").Value  
        ws.Cells(i, 5).Value = rs.Fields("ProductID").Value  
        ws.Cells(i, 6).Value = rs.Fields("Products").Value  
        ws.Cells(i, 7).Value = rs.Fields("SalePrice").Value  
        ws.Cells(i, 8).Value = rs.Fields("UnitCost").Value  
        ws.Cells(i, 9).Value = rs.Fields("OrderDate").Value  
        ws.Cells(i, 10).Value = rs.Fields("Quantity").Value  
        ws.Cells(i, 11).Value = rs.Fields("Profit").Value
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ws.Cells(i, 12).Value = rs.Fields("City").Value
ws.Cells(i, 13).Value = rs.Fields("OrderStatus").Value
rs.MoveNext
i = i + 1
Loop

```

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'close connection
rs.Close
conn.Close
Set rs = Nothing
Set conn = Nothing

```

End Sub

2. ColorOrderStatus

```

Sub ColorOrderStatus()
    Dim ws As Worksheet
    Dim lastRow As Long
    Dim statusRange As Range
    Dim cell As Range

    ' Define Data Range
    Set ws = ThisWorkbook.Sheets("OnlineClothShop")
    lastRow = ws.Cells(ws.Rows.Count, "M").End(xlUp).Row
    Set statusRange = ws.Range("M4:M" & lastRow) 'Data start from M4

    ' Color OrderStatus
    For Each cell In statusRange
        If cell.Value = "Pending" Then
            cell.Interior.Color = RGB(255, 255, 0) ' Yellow
        ElseIf cell.Value = "Shipped" Then
            cell.Interior.Color = RGB(0, 176, 240) ' Blue
        ElseIf cell.Value = "Delivered" Then
            cell.Interior.Color = RGB(146, 208, 80) ' Green
        Else
            cell.Interior.Color = xlNone ' No color
        End If
    Next cell

```

End Sub

3. SaveDataToDatabase

```

Sub SaveDataToDatabase()
    Dim conn As Object
    Dim dbData As String

```

```

Dim sql As String
Dim ws As Worksheet
Dim CustomerID As String, OrderID As String
Dim CustomerName As String, Gender As String
Dim ProductID As String, Products As String
Dim SalePrice As Double, UnitCost As Double
Dim OrderDate As String, Quantity As Integer
Dim Profit As Double, City As String, OrderStatus As String

' define worksheet
Set ws = ThisWorkbook.Sheets("OnlineClothShop")
dbData = ThisWorkbook.Path & "\Project2.accdb"

' insert info
OrderID = ws.Range("OrderID").Value
CustomerID = ws.Range("CustomerID").Value
CustomerName = ws.Range("CustomerName").Value
Gender = ws.Range("Gender").Value
ProductID = ws.Range("ProductID").Value
Products = ws.Range("Products").Value
SalePrice = ws.Range("SalePrice").Value
UnitCost = ws.Range("UnitCost").Value
OrderDate = ws.Range("OrderDate").Value
Quantity = ws.Range("Quantity").Value
Profit = ws.Range("Profit").Value
City = ws.Range("City").Value
OrderStatus = ws.Range("OrderStatus").Value

' Link Access
Set conn = CreateObject("ADODB.Connection")
conn.Open "Provider=Microsoft.ACE.OLEDB.12.0;Data Source=" & dbData

' link SQL query
sql = "INSERT INTO Data (OrderID, CustomerID, CustomerName, Gender, ProductID,
Products, SalePrice, UnitCost, OrderDate, Quantity, Profit, City, OrderStatus) " & _
"VALUES (" & OrderID & ", " & CustomerID & ", " & CustomerName & ", " & Gender
& ", " & ProductID & ", " & Products & ", " & SalePrice & ", " & UnitCost & ", #" &
OrderDate & "#, " & Quantity & ", " & Profit & ", " & City & ", " & OrderStatus & ")"

' Execute the SQL query directly
conn.Execute sql

' Clean up
conn.Close
Set conn = Nothing

End Sub

```

4. GetCustomerDetailsAndOutstandingOrders

```
Sub GetCustomerDetailsAndOutstandingOrders()
    Dim conn As Object, rs As Object
    Dim ws As Worksheet
    Dim strSQL As String, CustomerName As String
    Dim dbData As String
    Dim i As Integer

    ' Worksheet setup
    Set ws = ThisWorkbook.Sheets("CustomerDetails")
    ws.Range("A1:F10").ClearContents

    ' Database path and customer name input
    dbData = ThisWorkbook.Path & "\Project2.accdb"
    CustomerName = InputBox("Enter the customer's name:", "Customer Lookup")
    If CustomerName = "" Then Exit Sub

    ' SQL query
    strSQL = "SELECT Customers.CustomerName, Customers.Gender, Orders.OrderID,
OrdersProducts.SalePrice, " & _
        "Orders.OrderDate, Orders.OrderStatus " & _
        "FROM (Customers " & _
        "INNER JOIN Orders ON Customers.CustomerID = Orders.CustomerID) " & _
        "INNER JOIN OrdersProducts ON OrdersProducts.OrderID = Orders.OrderID " & _
        "WHERE Customers.CustomerName = " & Replace(CustomerName, "'", "''") & " " & _
        "AND OrdersProducts.SalePrice > 100"

    ' Connect to database and execute query
    Set conn = CreateObject("ADODB.Connection")
    conn.Open "Provider=Microsoft.ACE.OLEDB.12.0;Data Source=" & dbData & ";"
    Set rs = conn.Execute(strSQL)

    ' Output headers and data
    For i = 0 To rs.Fields.Count - 1
        ws.Cells(1, i + 1).Value = rs.Fields(i).Name
    Next i
    ws.Range("A2").CopyFromRecordset rs

End Sub
```