Summary on Recordset related statements

Read Chapter 13 and 14 of Beginners ASP 3.0 (Wrox)

Methods for moving through Records in the Recordset Object: (setting the pointer)
- MoveNext
- MovePrevious
- MoveFirst
- MoveLast

How to Use:
```
RecordsetName.methodname
```

For example if the recordset name is ‘joebloe’ and you want to move the pointer to the previous record the statement could be:
```
joebloe.MovePrevious
```

Jumping through records in the Recordset Object by a specified number:
```
RecordsetName. Move methodname NumRecords, Start
```

(start is optional)

Examples:
```
joebloe.Move 2    : jump forward 2 places
Joebloe.Move -3  : jump back three records
```

Moving through the fields of a Recordset (using field pointer):

Getting the values of the fields (e.g. display the values of all the fields in the current record ‘joebloe’ recordset)
```
For Each joe in joebloe.Fields
    Response.Write(joe.Value)  (Name property of joe returns the value of the field currently pointed by joe)
Next
```

Examples:
```
Display the value of 3rd field of the 103rd record of the recordset (assume that there are more than 103 records)
For i = 1 to 102    (Use and test this code using the ‘Move’)
    joebloe.MoveNext
Next
j = 1
For Each joe in joebloe.Fields
    If j = 3 Then
        Response.Write (joe.Value)
    End if
    j = j + 1
Next
```

Getting the Names of the fields: (e.g. display the names of all the fields in the ‘joebloe’ recordset)
```
For Each joe in joebloe.Fields
    Response.Write(joe.Name)  (Name property of joe returns the name of the field currently pointed by joe)
Next
```

Examples:
```
Display the Name of 4th field in the recordset.
j = 1
For Each joe in joebloe.Fields
    If j = 4 Then
        Response.Write (joe.Name)
    End if
    j = j + 1
Next
```
EXAMPLE:

Following is a table (‘Contact’) in the ‘Contact’ database.

<table>
<thead>
<tr>
<th>ContactID</th>
<th>Name</th>
<th>Address</th>
<th>Town</th>
<th>State</th>
<th>ZipCode</th>
<th>Phone</th>
<th>IsDefaultRecord</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aardvark Limited</td>
<td>All Saints Street</td>
<td>Athens</td>
<td>OH</td>
<td>39812</td>
<td>216-376-1298</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Burger Queen</td>
<td>Constants Avenue</td>
<td>Houston</td>
<td>TX</td>
<td>30517</td>
<td>713-771-6727</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Education Dept.</td>
<td>The Offices, City Square</td>
<td>Chicago</td>
<td>IL</td>
<td>10745</td>
<td>312-712-8567</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Cummings Intl.</td>
<td>124th Street West</td>
<td>Pittsburgh</td>
<td>PA</td>
<td>17265</td>
<td>412-455-6104</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>J.R.Higgins</td>
<td>The Market</td>
<td>Green Bay</td>
<td>WI</td>
<td>61733</td>
<td>414-831-8812</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>James Builders</td>
<td>2131 New Street</td>
<td>Phoenix</td>
<td>AZ</td>
<td>78034</td>
<td>602-281-3318</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Jonahs Boats</td>
<td>The Quay</td>
<td>Stocksville</td>
<td>FL</td>
<td>16734</td>
<td>305-711-8855</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Le Bistro</td>
<td>Rue Francais</td>
<td>Vancouver</td>
<td>WA</td>
<td>41322</td>
<td>206-133-8294</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Major Records</td>
<td>Third Avenue</td>
<td>Stocksville</td>
<td>FL</td>
<td>10015</td>
<td>305-711-7851</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Martha's Bar</td>
<td>Top Street</td>
<td>Clarksville</td>
<td>NY</td>
<td>54876</td>
<td>305-922-5555</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>Miracle Supplies</td>
<td>18th Avenue</td>
<td>Oakland</td>
<td>CA</td>
<td>10593</td>
<td>415-671-6633</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>Pedro Mana</td>
<td>Calle Sebastione</td>
<td>St. Paul</td>
<td>MN</td>
<td>65109</td>
<td>612-401-1350</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>Union Records</td>
<td>712 Main Street</td>
<td>Tampa</td>
<td>FL</td>
<td>51267</td>
<td>813-167-3520</td>
<td>1</td>
</tr>
</tbody>
</table>

Q4. a. Write code to display a form on the screen to enter a state code (FL, TX or NY etc.) in a text box and the list of all the fields of the contact database with checkbox capability as shown below. The field names need to be extracted from the database and must not be hard coded.

Solution:

**Hard coded version – the field names are hard coded in html**

```html
<html>
<head>
<title>Display form</title>
</head>

<body>
<form NAME="ContactInfo" ACTION="ContactsQuery.asp" METHOD="POST">
```

Find Contacts by State

Enter the State to find: [Input Field]

Please select which fields you would like:

- [ ] ContactID
- [ ] Name
- [ ] Address
- [ ] Town
- [ ] State
- [ ] ZipCode
- [ ] Phone
- [ ] IsDefaultRecord

[Find] [Clear]

```html
</form>
</body>
</html>
```
Field names are extracted from the Recordset

Problem (continuation)
An example screen of the above code when opened with the browser along with some entry and the expected output is shown in the figures below. It displays the selected fields for the selected State. Write the code to get this expected output when the form is submitted. Test your code and make sure that it performs the above functions.
Find Contacts by State

Enter the State to find: FL

Please select which fields you would like:

- ContactID
- Name
- Address
- Town
- State
- ZipCode
- Phone
- IsDefaultRecord

Find | Clear

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jonahs Boats</td>
<td>The Quay</td>
<td>FL</td>
</tr>
<tr>
<td>Major Records</td>
<td>Third Avenue</td>
<td>FL</td>
</tr>
<tr>
<td>Union Records</td>
<td>712 Main Street</td>
<td>FL</td>
</tr>
</tbody>
</table>

Solution Hints:

<html>
<head><title>Find Contacts</title></head>
<body>
<% Function RecToTable (objRec) %>

' build the table header
strT = "<TABLE BORDER=1><TR ALIGN=CENTER>"

' each field as a table column name
For Each fldF In objRec.Fields
    strT = strT & "<TD>" & fldF.Name & "</TD>"
Next
strT = strT & "</TR>"

' now build the rows
While Not objRec.EOF
    strT = strT & "<TR ALIGN=CENTER>"

    ' add the fields
    For Each fldF in objRec.Fields
        strT = strT & "<TD>" & fldF.Value & "</TD>"
    Next
    strT = strT & "</TR>"
    objRec.MoveNext
Wend
strT = strT & "</TABLE>"

' and finally return the table
RecToTable = strT

End Function
%

<% 'connect to the database

Sample screen and data to enter the name of the state and list of all the fields.

The expected output screen for the data entered.
strconn = "DRIVER=Microsoft Access Driver (*.mdb);DBQ=Server.MapPath("contact.mdb")"
SET objConn = Server.CreateObject("ADODB.Connection")
objConn.Open strconn

' check whether any field is selected or not
If Request.Form("Field").Count > 0 Then
    strSQL = "SELECT " & Request.Form("Field") & " FROM Contact"
    ' only add a where clause if they requested a state
    If Request.Form("State") <> "" Then
        strSQL = strSQL & " WHERE State = " & Request.Form("State") & ";"
    End If
    ' create the recordset
    Set objRec = Server.CreateObject("ADODB.Recordset")
    objRec.Open strSQL, objConn
    ' write a table of the recordset
    Response.Write RecToTable (objRec)
    ' clean up
    objRec.Close
    Set objRec = Nothing
    objConn.Close
Else
    Response.Write "<H1>No field has been selected</H1>"
End If
%
</body>
</html>

Q. a. Display all records in the Recordset Object from a specified record number (e.g. all records starting from record no 5 to the end or all records starting with letter 'M' to the end).
   b. Display the above record form a specified record number in the reverse order (e.g. display all records from 1 to 10 or starting with 'A' and ending with 'h').
   c. Display only even numbered records (e.g. display record numbers 6, 8, 10 etc).
   d. Display only odd numbered records (e.g. display record numbers 21, 23, 25 etc).
   e. Display the records starting from a specified number until another number (e.g display records 13 to 20)
   f. Display the last records in the recordset (e.g. last record retrieved is the lowest salaried person sorted)

Read and solve the practice Examples in chapter 13 and chapter 14 of Beginner’s ASP 3.0 (wrox) book.