

## FILTERING RECORDS

---

Sorting data in a table organizes it in a logical manner, but you still have the entire table to work with. One of the Filter commands can be used to find records containing information in one or more fields that match a particular pattern. Simple filters can be applied while information in a table is being viewed. It is also possible to apply a second filter to the results of the first one to refine the search. Filters can be applied to a table by using the Filtering buttons on the toolbar, choosing Filter from the Records menu, or by using the Shortcut menu. However, not all filtering options or commands are available in each of these places. For this lesson, you will be using the **Access Training (Chamber)** database.

### FILTERING BY SELECTION

This option allows you to find an example of particular criteria for the filter. You then place the insertion point in the field and then apply the filter. To do this:

- ❖ Open the **Customers** table in **Datasheet View**.
- ❖ In the **State** column, click any cell that contains **IN (Indiana)**.
- ❖ Do one of the following:
  - Click **Records** on the **Menu Bar**, choose **Filter**, and then choose **Filter By Selection**.
  - Click the **Filter By Selection** button on the toolbar (see illustration at right).
- ❖ Only those records where the **State** equals **IN** should be displayed.
- ❖ To remove this filter, do one of the following:
  - Click **Records** on the **Menu Bar** and then select **Remove Filter/Sort**.
  - Click the **Remove Filter** button on the toolbar (see illustration at right).
- ❖ All the records should be displayed.



### FILTERING BY FORM USING ONE CRITERIA

This type of filter provides a quick and easy way to filter a table based on the information in several fields. When a table is opened and this option is chosen, a simple datasheet with blank cells will be displayed. Each of the blank cells is a combo box with a scrollable drop-down list of all the entries in that field.

- ❖ Open the **Customer** table in **Datasheet View**, if necessary.
- ❖ Do one of the following:
  - Click **Records** on the **Menu Bar**, click **Filter** from the list, and then click **Filter by Form**.
  - Click the **Filter by Form** button on the toolbar (see illustration at right).
- ❖ If there is information in the **State** field, delete it.
- ❖ In the **City** field, click the drop-down arrow and choose **Terre Haute**.
- ❖ Do one of the following:
  - Choose **Filter** on the **Menu Bar** and then choose **Apply Filter/Sort**.
  - Click the **Apply Filter** button on the toolbar.
    - This button is a toggle button.
    - When a filter has not been applied, it becomes the **Apply Filter** button.
    - When a filter has already been applied, it becomes the **Remove Filter** button.
- ❖ Remove the filter from the table by using one of the methods described earlier.



### FILTER BY FORM USING MORE THAN ONE CRITERIA

When working with the Filter by Form option, it is possible to specify more than one criterion for selecting the records. This is a good filter to use when you are looking for a city in a specific state.

- ❖ Select the **Filter by Forms** option using one of the methods described earlier.

- ❖ Make sure all the criteria are removed from the **Filter by Form** datasheet.
- ❖ Click the **City** column and select **Charleston** from the drop-down list.
- ❖ Click the **State** column and select **IL (Illinois)** from the drop-down list.
- ❖ Apply the filter for the specified criteria.
- ❖ After viewing the results, remove the filter from the table.
- ❖ Close the **Customer** table

## USING THE ADVANCED FILTERING OPTION

This type of filter is used when it is necessary to apply options such as greater than, equal to, not equal to, and so forth.

### CREATING A FILTER USING THE AND FILTER OPTION

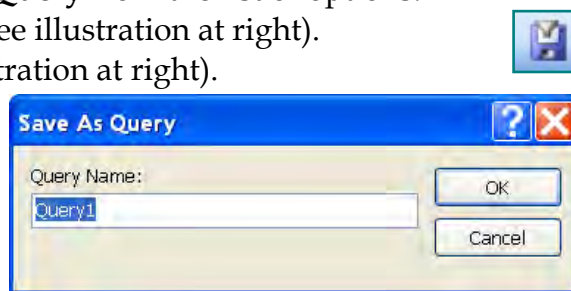
- ❖ Open the **Employees** table.
- ❖ Click **Records** on the **Menu Bar**.
- ❖ Click **Filter** from the list that appears.
- ❖ Choose **Advanced Filter/Sort** from the next list that appears.
- ❖ The **Filter** design grid will be displayed. This looks similar to the query design grid.
- ❖ Add the **Department** and **Salary** fields to the Design grid, by doing one of the following:
  - Double-click on the field name in the **Employee** box.
  - Drag the field name to the Advanced Filter grid.
  - Click the list arrow in the Advanced Filter grid and select the field name.
- ❖ In the criteria row for the **Department**, input **=Marketing** and then press **Enter**.
- ❖ In the criteria row for **Salary** input **>=35000**.
- ❖ Click the **Apply Filter** button on the toolbar.
- ❖ One record should appear in Datasheet View for this filter.
- ❖ Click the **Remove Filter** button.

### CREATING A FILTER USING THE OR FILTER OPTION

- ❖ Choose **Records** on the **Menu Bar** again.
- ❖ Choose **Filter, Advanced Filter Sort**.
- ❖ The criteria specified earlier should appear in the design grid.
- ❖ In the **Or** row for **Department**, input **=Accounting**.
- ❖ Click the **Apply Filter** button.
- ❖ You should see **four** records for this filter.

### SAVING THE FILTER AS A QUERY

- ❖ Open the **Design View** window by clicking **Employees Filter** on the **Task Bar**.
- ❖ Do one of the following:
  - Click **File** on the **Menu Bar** and choose **Save as Query** from the list of options.
  - Click the **Save as Query** button on the toolbar (see illustration at right).
- ❖ The **Save as Query** dialog box will appear (see illustration at right).
- ❖ Input the name, **Accounting and Marketing with Salary >= \$35,000**.
- ❖ Close the **Design View** window.
- ❖ Click the **Remove Filter** button.
- ❖ Click the **Query** option in the **Objects** pane.
- ❖ The saved filter should appear as a Query in the list of queries.



## USING THE FILTER EXCLUDING SELECTION OPTION

With this type of filter, all the records except the ones with the specified criteria will be included in the results of the filter.

- ❖ In the **Date Hired** column, click any record that contains **7/15/93**.
- ❖ Click **Records** on the **Menu Bar**.
- ❖ Select **Filter** from the list that appears.
- ❖ Click **Filter Excluding Selection** from the next list.
- ❖ Check the results of the filter.
- ❖ Any records with the specified criteria should not appear in the table.
- ❖ Remove the filter from the table.

## USING THE FILTER FOR OPTION

This option is available only when you right-click and use the shortcut menu. It allows you to specify which criteria are to be used.

- ❖ Click in the **Department** column in the table.
- ❖ Right-click to open the shortcut menu.
- ❖ Click in the box for the **Filter For** option.
- ❖ In this box, input **Sales** and then press **Enter** on the keyboard.
- ❖ Only records for the **Sales Department** should be displayed.
- ❖ Remove the filter from the table.

## FILTERING BY SELECTION

This option allows you to find an example of particular criteria for the filter. You then place the insertion point in the field and then apply the filter. To do this:

- ❖ Open the **Customers** table in **Datasheet View**.
- ❖ In the **State** column, click any cell that contains **IN (Indiana)**.
- ❖ Do one of the following:
  - Click **Records** on the **Menu Bar**, choose **Filter**, and then choose **Filter By Selection**.
  - Click the **Filter By Selection** button on the toolbar (see illustration at right).
- ❖ Only those records where the **State** equals **IN** should be displayed.
- ❖ To remove this filter, do one of the following:
  - Click **Records** on the **Menu Bar** and then select **Remove Filter/Sort**.
  - Click the **Remove Filter** button on the toolbar (see illustration at right).
- ❖ All the records should be displayed.



## FILTERING BY FORM USING ONE CRITERIA

This type of filter provides a quick and easy way to filter a table based on the information in several fields. When a table is opened and this option is chosen, a simple datasheet with blank cells will be displayed. Each of the blank cells is a combo box with a scrollable drop-down list of all the entries in that field.

- ❖ Open the **Customer** table in **Datasheet View**, if necessary.
- ❖ Do one of the following:
  - Click **Records** on the **Menu Bar**, click **Filter** from the list, and then click **Filter by Form**.
  - Click the **Filter by Form** button on the toolbar (see illustration at right).
- ❖ If there is information in the **State** field, delete it.
- ❖ In the **City** field, click the drop-down arrow and choose **Terre Haute**.
- ❖ Do one of the following:
  - Choose **Filter** on the **Menu Bar** and then choose **Apply Filter/Sort**.



➤ Click the **Apply Filter** button on the toolbar.

- This button is a toggle button.
- When a filter has not been applied, it becomes the **Apply Filter** button.
- When a filter has already been applied, it becomes the **Remove Filter** button.



❖ Remove the filter from the table by using one of the methods described earlier.

### **FILTER BY FORM USING MORE THAN ONE CRITERIA**

When working with the Filter by Form option, it is possible to specify more than one criterion for selecting the records. This is a good filter to use when you are looking for a city in a specific state.

- ❖ Select the **Filter by Forms** option using one of the methods described earlier.
- ❖ Make sure all the criteria are removed from the **Filter by Form** datasheet.
- ❖ Click the **City** column and select **Charleston** from the drop-down list.
- ❖ Click the **State** column and select **IL (Illinois)** from the drop-down list.
- ❖ Apply the filter for the specified criteria.
- ❖ After viewing the results, remove the filter from the table.
- ❖ Close the **Customer** table

### **USING THE ADVANCED FILTERING OPTION**

This type of filter is used when it is necessary to apply options such as greater than, equal to, not equal to, and so forth.

### **CREATING A FILTER USING THE AND FILTER OPTION**

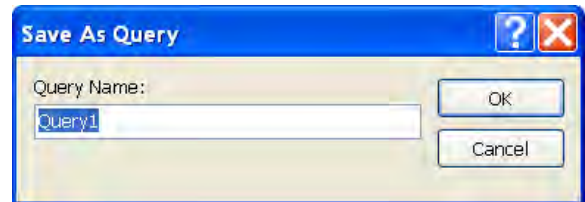
- ❖ Open the **Employees** table.
- ❖ Click **Records** on the **Menu Bar**.
- ❖ Click **Filter** from the list that appears.
- ❖ Choose **Advanced Filter/Sort** from the next list that appears.
- ❖ The **Filter** design grid will be displayed. This looks similar to the query design grid.
- ❖ Add the **Department** and **Salary** fields to the **Design** grid, by doing one of the following:
  - Double-click on the field name in the **Employee** box.
  - Drag the field name to the **Advanced Filter** grid.
  - Click the list arrow in the **Advanced Filter** grid and select the field name.
- ❖ In the criteria row for the **Department**, input **=Marketing** and then press **Enter**.
- ❖ In the criteria row for **Salary** input **>=35000**.
- ❖ Click the **Apply Filter** button on the toolbar.
- ❖ One record should appear in **Datasheet View** for this filter.
- ❖ Click the **Remove Filter** button.

### **CREATING A FILTER USING THE OR FILTER OPTION**

- ❖ Choose **Records** on the **Menu Bar** again.
- ❖ Choose **Filter, Advanced Filter Sort**.
- ❖ The criteria specified earlier should appear in the design grid.
- ❖ In the **Or** row for **Department**, input **=Accounting**.
- ❖ Click the **Apply Filter** button.
- ❖ You should see **four** records for this filter.

## SAVING THE FILTER AS A QUERY

- ❖ Open the **Design View** window by clicking **Employees Filter** on the **Task Bar**.
- ❖ Do one of the following:
  - Click **File** on the **Menu Bar** and choose **Save as Query** from the list of options.
  - Click the **Save as Query** button on the toolbar (see illustration at right).
- ❖ The **Save as Query** dialog box will appear (see illustration at right).
- ❖ Input the name, **Accounting and Marketing with Salary >= \$35,000**.
- ❖ Close the **Design View** window.
- ❖ Click the **Remove Filter** button.
- ❖ Click the **Query** option in the **Objects** pane.
- ❖ The saved filter should appear as a Query in the list of queries.



## USING THE FILTER EXCLUDING SELECTION OPTION

With this type of filter, all the records except the ones with the specified criteria will be included in the results of the filter.

- ❖ In the **Date Hired** column, click any record that contains **7/15/93**.
- ❖ Click **Records** on the **Menu Bar**.
- ❖ Select **Filter** from the list that appears.
- ❖ Click **Filter Excluding Selection** from the next list.
- ❖ Check the results of the filter. Any records with the specified criteria should not appear in the table.
- ❖ Remove the filter from the table.

## USING THE FILTER FOR OPTION

This option is available only when you right-click and use the shortcut menu. It allows you to specify which criteria are to be used.

- ❖ Click in the **Department** column in the table.
- ❖ Right-click to open the shortcut menu.
- ❖ Click in the box for the **Filter For** option.
- ❖ In this box, input **Sales** and then press **Enter** on the keyboard.
- ❖ Only records for the **Sales Department** should be displayed.
- ❖ Remove the filter from the table.