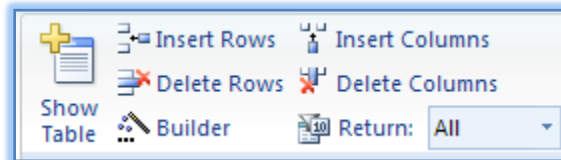


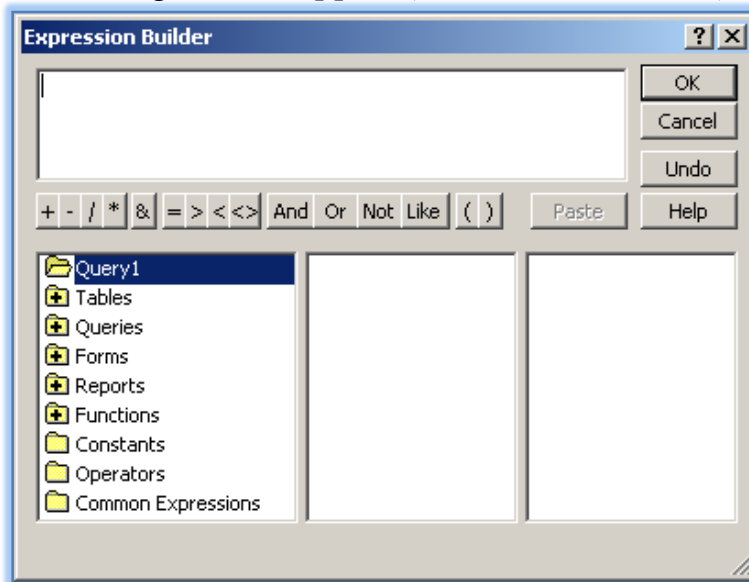
## CREATING A QUERY USING TOTALS AND BUILD OPTIONS

Build options are used to perform calculations in a query. The Expression Builder is used to generate the search criteria for the query. We will be using the [Access Training](#) database. This database is located in the folder that was downloaded from the [Access 2007 Training Web Page](#).

- ❖ Click the **Create Tab**.
- ❖ In the **Others Group**, click the **Query Design** button.
- ❖ Select the **Spot orders** table from the **Show Tables** list.
- ❖ Add the fields **IDSpot**, **ClientID**, and **Start date** to the Design grid.
- ❖ Add the **Totals** line to the **Design** grid using one of the options described in the previous section.
- ❖ In the column for **IDSpot**, click the **Total** cell.
- ❖ From the list choose **Count**.
- ❖ In the column for **Start date**, click the **Total** cell.
- ❖ From the list choose **Where**.
  - You have to add this extra step for entering query criteria whenever the **Total** row is visible in Query Design View.
  - Choosing **Where** automatically removes the check mark for the **Show** box for that field.
- ❖ In the column for **Start date**, click the **Criteria** cell.
- ❖ Click the **Builder** button in the **Query Setup Group** (see illustration below).



- ❖ The **Expression Builder** dialog box will appear (see illustration below).



- ❖ In the **Expression Builder**, click the **greater than (>)** button.
- ❖ In the **left** list, double-click the **Functions** folder.
- ❖ Click the **Built-In Functions** subfolder.
- ❖ In the **middle** list, click **Date/Time**.
  - Make sure that you click the middle list only **once**.
  - A double-click will add a term to the upper text box.

- ❖ In the **right** list, double-click **Date**.
- ❖ Type **-90** in the box at the top of the dialog box, next to the parentheses after the word **Date**.
- ❖ Click **OK** to exit the dialog box and place the expression in the **Criteria** row.
- ❖ In the **Design View** window, press **Tab**.
- ❖ Save the file with the name **Count spots for clients in last 90 days**.
- ❖ Test the query by clicking the **View** or the **Run** button in the **Results Group**.
  - In the Datasheet View for the query, the field **Count of ID Spot** shows the number of spots each client has purchased for running during the past 90 days.
  - When the database was created, summer 2008 was used as the example.
  - Because the query is being run at this time, the query results will not show the data.
- ❖ If this query was run earlier than summer 2008, this problem could be solved, by completing the steps below:
  - Return to **Query Design View**.
  - In the upper pane, double-click the **Start date** field to add it to the query a second time. When creating a query, it is possible to add a field to the query more than once.
  - In the second column for **Start date**, click the **Total** cell.
  - From the list, choose **Where**.
  - In this same column, click the **Criteria** cell.
  - Click the **Builder** button on the toolbar.
  - In the **Expression Builder** dialog box, click the **less than (<)** button.
  - In the **left** list, double-click the **Functions** folder.
  - Click the **Built-In Functions** subfolder under **Functions**.
  - In the **middle** list, click **Date/Time**.
    - Make sure that you click the middle list only once.
    - A double-click will add a term to the upper text box.
  - In the **right** list, double-click **Now** and then click **OK**.
  - In the **Design View** window, press the **Tab** key.
  - Save the query.
- ❖ To test the revised query, view it in Datasheet View.
  - If this query were being run during the same quarter of the year 2008 as when it was created, you would see the results of the query.
  - If the query were being run earlier than the quarter when it was created, you would not see any results – which is correct.
  - If the query were being run during a later quarter than when it was created, you would not see any results – which is also correct.
  - Sometimes when a query does not show any results, it is a good thing.
- ❖ Close the query, saving the changes if necessary.