

# SeQueL 7 - Queries - Get to the BOTTOM of It

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I wanted a value from the last record in a recordset. I knew there was a way to get it! I tried SELECT LAST ... ; SELECT BOTTOM ... . I looked in the index section of my more than half dozen MS Access reference books. Finally, in two of them (MS Access 2 and MS Access 95) I found mention of 'TOP SELECT predicate'. There are some other SELECT predicates that I do not want to discuss, now. (e.g.: ALL, DISTINCT, DISTINCTROW) I also found it in one of my SQL Server reference books. Looking back, after I had my solution, I found reference to a Query Property: TopValue, in MS Access.

If you are using the MS Access Query Design Form, after you have defined the query fields and criteria, (click on a blank area of the form then select menu item: View -> Properties) or (Right Click on a blank area of the form and select Properties...). It should open a Query Properties subform with a General tab. Partway down the form, you should find a Top Values property, with suggested choices (e.g.: 5, 25, 100, 25%, All). After you have made your selection, you can close the Query Properties subform.

You can right click on the Query Design Form and select SQL View.

If you selected 5 this will show you that:

```
SELECT SymptomTime, SymptomLevel
FROM SymptomTimeSymptom
WHERE SymptomLevel > 4
ORDER BY SymptomTime ASC
```

Has become:

```
SELECT TOP 5 SymptomTime, SymptomLevel
FROM SymptomTimeSymptom
WHERE SymptomLevel > 4
ORDER BY SymptomTime ASC
```

When you display the Datasheet View, you will see the 'first' or TOP records fitting the criteria.

```
-----
| SymptomTime           | SymptomLevel |
| 1/25/2009 4:15:37 PM  |             6 |
| 1/25/2009 8:50:37 PM  |             6 |
| 2/19/2009 10:54:08 AM |             6 |
| 7/17/2009 7:17:57 AM  |             6 |
| 7/24/2009 6:15:44 PM  |             8 |
-----
```

If you change the TOP Predicate value from 5 to 2 and reverse the sort order:

```
SELECT TOP 2 SymptomTime, SymptomLevel
FROM SymptomTimeSymptom
WHERE SymptomLevel > 4
ORDER BY SymptomTime DESC
```

The result will be the last or bottom two records:

```
-----
| SymptomTime           | SymptomLevel |
| 11/17/2013 2:00:08 AM |             6 |
| 10/29/2013 8:11:06 PM |             6 |
-----
```

Changing that TOP Predicate value to 1 gives me the 'last' or 'bottom' record that I was seeking!

```
SELECT TOP 1 SymptomTime, SymptomLevel
FROM SymptomTimeSymptom
WHERE SymptomLevel > 4
ORDER BY SymptomTime DESC
```

Result:

```
-----
| SymptomTime           | SymptomLevel |
| 1/17/2013 2:00:08 AM  |             6 |
-----
```

Once you know the secret it is easy!