

UseVariablesInSQL

(Q) In code behind my form, I'm trying to reference the value contained in a control on my form in a SQL statement. But I'm not successful in doing this. I'm using the following syntax:

tags:
[HowTo](#)

```
sSQL = "SELECT * FROM Employees WHERE [LastName] = myControl.Value"
```

What am I doing wrong??

(R) In order to reference values contained in form controls, you have to use the & operator and concatenate the results. The positioning of quotes is also important.

Solution

- In an SQL statement query-, table- and fieldnames are surrounded with a special character which is depending on the used Relational Database Management System. When used in character strings whose SQL nature is recognizable (in **form filtering**, in a **RunSQL** action, a **RecordSource** or **ControlSource** property, ...), *Access2Base* will substitute the square brackets ([...]) with the correct character.
In next examples the resulting SQL statement is assumed to be used for such a purpose, reason why it still contains square brackets.
- When the WHERE clause refers to a numeric field, it is sufficient to concatenate the SQL sentence and the value, like in:

```
sSQL = "SELECT * FROM Employees WHERE [Age] >= " & myNumericControl.Value
```

- A bit more complicated is the reference to a date field. Simplest is to use the ISO representation of a date 'YYYY-MM-DD' (between single quotes):

```
Dim sDate As String
Const cstQuote = "'" & "Single quote
sDate = Format(myDateControl.Value), "YYYY-MM-DD")
sSQL = "SELECT * FROM Employees WHERE [BirthDate] = " & cstQuote & sDate & cstQuote
```

- Similarly if the database field is of Date/Time type, the time should be added in the SQL statement. However the "time" control in the form is separated from the "date" one.

```
Dim sDateTime As String
Const cstQuote = "'" & "Single quote
sDateTime = Format(myDateControl.Value + myTimeControl, "YYYY-MM-DD HH:MM:SS")
sSQL = "SELECT * FROM Employees WHERE [BirthDateTime] = " & cstQuote & sDateTime & cstQuote
```

- Finally for simple strings, it seems easy. Just surround them with single quotes. However, if the string itself is able to contain a single quote, it is safer to anticipate its doubling:

```
Dim sName As String
Const cstQuote = "'" & "Single quote
sName = Join(Split(myCharControl.Value, cstQuote), cstQuote & cstQuote)
sSQL = "SELECT * FROM Employees WHERE [LastName] = " & cstQuote & sName & cstQuote
```

Bookmark this page » » [UseVariablesInSQL](#)