

Spring2017 : Database- E:\Spring2017.accdb (Access 2007 - 2016 file format) - Access

File Home Create External Data Database Tools ? Tell me what you want to do... Sign in

View Cut
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Filter Ascending Selection
Descending Advanced
Remove Sort Toggle Filter

Refresh New Totals
All Save Spelling
Delete More

Find ab Replace
Go To Select
Select

B I U A ab Text Formatting

SECURITY WARNING Some active content has been disabled. Click for more details. Enable Content

All Access Obj... <<

Search... Tables Queries

student Cimajor

This is the database we started last week in class.
I will put it up on the web so you can download it.

Ready Num Lock

Windows Internet Explorer File Google Chrome Mozilla Firefox Microsoft Word Microsoft Excel

11:05 AM 2/2/2017

Spring2017 : Database- E:\Spring2017.accdb (Access 2007 - 2016 file format) - Access

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Application Parts Tables Templates SharePoint Lists Query Wizard Design Queries Form Design Blank Form Navigation More Forms Report Design Reports Labels Reports Macros & Code Class Module Visual Basic

All Access Obj... <>

Search... Tables student Queries Clmajor

To create a query choose Create and then Query Design.

Ready Num Lock

Windows Internet Explorer File Explorer Google Chrome Mozilla Firefox Microsoft Word Microsoft Excel 11:07 AM 2/2/2017

This screenshot shows the Microsoft Access 2016 interface. The ribbon at the top has tabs for File, Home, Create, External Data, and Database Tools. The 'Create' tab is highlighted with a pink arrow. Below the ribbon is a toolbar with various icons for creating tables, forms, reports, and macros. A search bar says 'Tell me what you want to do...'. On the left, a 'All Access Obj...' task pane lists 'Tables' (student is selected) and 'Queries' (Clmajor). The main area contains the text 'To create a query choose Create and then Query Design.' At the bottom, the Windows taskbar shows icons for various applications and the system tray displays the date and time (11:07 AM, 2/2/2017).

File Home Create External Data Database Tools Design ? Sign in

SQL ! View Run Select Make Append Update Crosstab Delete Union Pass-Through Data Definition Insert Rows Insert Columns Delete Rows Delete Columns Builder Return: All

Results Query Type Show Table Query Setup Show/Hide

Property Sheet Table Names Totals Parameters

All Access Obj... <> Query1

Search... Tables student Queries Clmajor

student

* stuid namz major gpa numCr

Show Table

Tables Queries Both student

Add Close

Field: Table: Sort: Show: Criteria: or:

Ready Num Lock SQL

11:07 AM 2/2/2017

I now need to add the student table so I can bring down the fields.

File Home Create External Data Database Tools Design ? - X

View Run Select Make Append Update Crosstab Delete Union Insert Rows Insert Columns Pass-Through Delete Rows Delete Columns Data Definition Show Table Builder Return: All

Tell me what you want to do... Property Sheet Table Names

Results Query Type Query Setup Show/Hide

All Access Obj... <> Query1

Tables student
student
Queries Clmajor

The logic flowchart shows the logic that I am using in the query. Major and numCr are both on the criteria line which means they are in an AND relationship where both have to be true to display.

AND relationship

Field:	stuid	namz	major	gpa	numCr
Table:	student	student	student	student	student
Sort:	<input checked="" type="checkbox"/>				
Show:					
Criteria:	or:		"C1"		> 20

Ready Num Lock SQL

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View Cut Copy Filter Ascending Selection New Totals ABC Replace
Paste Save Spelling Descending Advanced Refresh All Go To
Format Painter Remove Sort Toggle Filter More Select
Views Clipboard Sort & Filter Records Find Text Formatting

All Access Obj... <> x

Search... Tables Queries

Tables: student
Queries: Clmajor

Query1

stuid	namz	major	gpa	numCr
11111	Susan Ash	CI	4	45
22222	Linda French	CI	3.2	30
21212	Donald Rivers	CI	3.8	25
55555	Ann Costa	CI	3	34
*			0	0

1 CI AND 7/20

Record: 1 of 4 No Filter Search

Ready Num Lock SQL

Title: Feb 2-11:14 AM (5 of 25)

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Refresh New Totals
Save Spelling
All Delete More

Find Replace Go To
Select

Calibri (Detail) 11 Text Formatting

All Access Obj... <> **Query1**

Tables student
Queries Clmajor

Search...

stuid	namz	major	gpa	numCr
11111	Susan Ash	CI	4	45
22222	Linda French	CI	3.2	30
21212	Donald Rivers	CI	3.8	25
55555	Ann Costa	CI	3	34
*			0	0

Microsoft Access
Do you want to save changes to the design of query 'Query1'?
Yes No Cancel

Record: 1 of 4 > No Filter Search

Ready Num Lock SQL

Windows Internet Explorer File Explorer Google Chrome Mozilla Firefox Microsoft Word Microsoft Access 11:14 AM 2/2/2017



Title: Feb 2-11:14 AM (6 of 25)

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View Cut
Paste Copy
Format Painter
Views Clipboard

Filter Ascending Selection
Descending Advanced
Remove Sort Toggle Filter

New Totals
Save Spelling
Refresh All Delete More

Find Replace Go To
Select

Calibri (Detail) 11 Text Formatting

All Access Obj... <> x

Search... x

Tables student
Queries Clmajor

Query1

stuid	namz	major	gpa	numCr
11111	Susan Ash	CI		
22222	Linda French	CI		
21212	Donald Rivers	CI		
55555	Ann Costa	CI		
*				

Save As

Query Name: CIandnumCgr20

OK Cancel

I am now naming the query.

Record: 1 of 4 No Filter Search

Ready Num Lock SQL

Windows Taskbar: Internet Explorer, File Explorer, Google Chrome, Mozilla Firefox, Microsoft Word, Microsoft Access

System Tray: 11:15 AM, 2/2/2017

Title: Feb 2-11:15 AM (7 of 25)

File Home Create External Data Database Tools Design ? Sign in

View Run Select Make Append Update Crosstab Delete Data Definition Show Table Insert Rows Insert Columns Union Pass-Through Delete Rows Delete Columns Builder Return: All Totals Parameters Table Names

Results Query Type Query Setup Show/Hide

All Access Obj... <> Query1

Tables student
student

Queries ClandnumCrgr20 Clmajor

student

- * stuid
- namz
- major
- gpa
- numCr

The logic is for two conditions in an OR relationship. Note that I put the CI on the criteria line and the > 20 on the or line.

Field:	stuid	namz	major	gpa	numCr
Table:	student	student	student	student	student
Sort:	<input checked="" type="checkbox"/>				
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Criteria:			"CI"		
or:				>20	

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Filter Ascending Selection
Descending Advanced
Remove Sort Toggle Filter

New Totals
Save Spelling
Refresh All
Delete More

Find ab ac Replace abc
Go To Select
Text Formatting

Calibri (Detail) 11

All Access Obj... <> Query1

Tables student
Queries ClandnumCrgr20 Clmajor

stuid	namz	major	gpa	numCr
11111	Susan Ash	CI	4	45
22222	Linda French	CI	3.2	30
21212	Donald Rivers	CI	3.8	25
33333	Jane Richards	BU	3	34
44444	Richard Souza	CI	2.9	15
55555	Ann Costa	CI	3	34
*			0	0

Record: 1 of 6 No Filter Search

Ready Num Lock SQL

Handwritten notes:
1 CI OR 2 BU

File Home Create External Data Database Tools Design ? - X

View Run Select Make Append Update Crosstab Delete Union Pass-Through Data Definition Show Table Insert Rows Insert Columns Delete Rows Delete Columns Builder Return: All Totals Parameters Property Sheet XYZ Table Names

All Access Obj... <> Query1

Tables student

Queries ClandnumCrg20 Clmajor ClnumCrg20

Diagram:

```

    graph TD
        OR((OR)) --- N1(( ))
        N1 --- CI((CI))
        N1 --- AND1((AND))
        CI --- Y1(( ))
        AND1 --- BU((BU))
        AND1 --- AND2((AND))
        BU --- N2(( ))
        AND2 --- N3(( ))
        N2 --- GPA1((GPA > 3))
        N3 --- GPA2((GPA > 2))
        GPA1 --- Display1[Display]
        GPA2 --- Display2[Display]
    
```

Annotations:

- Red text: OR, CI, AND.
- Green text: AND.
- Blue text: BU, GPA > 3, GPA > 2, Display.
- Blue lines: Hand-drawn connections between the nodes and the query design grid.

Query Design Grid:

Field:	stuId	namz	major	gpa	numCr
Table:	student	student	student	student	student
Sort:	<input checked="" type="checkbox"/>				
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Criteria:	or:				

Text on the right:

When I make the query CI and gpa > 3 will go on the Criteria line and BU and gpa > 2 will go on the or line.

File Home Create External Data Database Tools Design ? - X

View Run Select Make Append Update Crosstab Delete Data Definition

Union Pass-Through Show Table Insert Rows Insert Columns Delete Rows Delete Columns Builder Return: All

Totals Parameters Table Names

All Access Obj... <> Query1

Search... Tables student Queries ClandnumCrgr20 Clmajor ClornumCrgr20

student

* stuid namz major gpa numCr

Field: stuid namz major gpa numCr
Table: student student student student student
Sort:
Show:
Criteria: or:
"CI" > 3
"BU" > 2

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11:26 AM 2/2/2017

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Descending Advanced
Remove Sort Toggle Filter

New Totals Spelling
Refresh All Delete More

Find Replace Go To Select

Calibri (Detail) 11 Text Formatting

All Access Obj... << x

Search... Query1

Tables student
Queries ClandnumCrgr20
Climajor
ClornumCrgr20

stuid	namz	major	gpa	numCr
11111	Susan Ash	CI	4	45
12121	John Doe	BU	2.5	20
22222	Linda French	CI	3.2	30
21212	Donald Rivers	CI	3.8	25
33333	Jane Richards	BU	3	34
*			0	0

Record: 1 of 5 No Filter Search

Ready Num Lock SQL

Windows Taskbar: Internet Explorer, File Explorer, Google Chrome, Mozilla Firefox, Microsoft Word, Microsoft Excel, 11:27 AM, 2/2/2017

Title: Feb 2-11:27 AM (12 of 25)

File Home Create External Data Database Tools Design Tell me what you want to do... Sign in

View Run Select Make Append Update Crosstab Delete Union Pass-Through Data Definition Insert Rows Insert Columns Delete Rows Delete Columns Builder Show Table Return: All Totals Parameters Table Names

All Access Obj... << Search... Tables student Queries ClandnumCrg20 Clgr3orBGr2 Clmajor ClnumCrg20

Query1

student

*	stuid	namz	major	gpa	numCr
---	-------	------	-------	-----	-------

Field: stuid student namz student major student gpa student numCr student

Table: student student student student student

Show:

Criteria: or:

MAJOR has to be CI
AND either gpa > 3 or numCr > 20
has to be true.

Note that major has to be CI.

File Home Create External Data Database Tools Design

View Run Select Make Table Append Update Crosstab Delete Union Pass-Through Data Definition

Show Table Insert Rows Insert Columns Delete Rows Delete Columns Builder Return: All Totals Parameters Property Sheet Table Names

All Access Obj... <> Query1

Search... Tables student ClandnumCrg20 Clg3orBULgr2 Clmajor ClormumCrg20

student

* stuid namz major gpa numCr

has to be true

Major has to be true so it appears on the criteria line and on the or line. On the criteria line we need to also test for gpa > 3 and on the or line we need to also test for numCr > 20.

Field: stuid namz major gpa numCr
Table: student student student student student
Sort:
Show:
Criteria: "CI" > 3
or: "CI" > 20

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View Cut Copy Filter Ascending Selection New Totals ABC Spelling Refresh Save More Sort & Filter Advanced Remove Sort Toggle Filter All Delete Find ab ac Replace Go To Select Find Text Formatting

Calibri (Detail) 11

All Access Obj... <> x

Search... Tables student Queries ClandnumCrg20 Clgr3or8Ugr2 Clmajor ClnumCrg20

Query1

stuid	namz	major	gpa	numCr
11111	Susan Ash	CI	4	45
22222	Linda French	CI	3.2	30
21212	Donald Rivers	CI	3.8	25
55555	Ann Costa	CI	3	34
*			0	0

CT hold to be X're

→ 3 → 20

Record: 14 1 of 4 No Filter Search Num Lock SQL

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File Home Create External Data Database Tools ? Sign in

Cut Copy Paste Format Painter View Refresh All Delete More

Ascending Descending Advanced Remove Sort Toggle Filter

New Totals Spelling Find Replace Go To Select

Calibri (Detail) 11 Text Formatting

All Access Obj... <> x

Search... Tables student Queries ClandnumCrg20 Clgr3orBUsr2 Clmajor ClnumCrg20

Query1

stuid	namz	major	gpa	numCr
11111	Susan Ash	CI	4	45
22222	Linda French	CI	3.2	30
21212	Donald Rivers	CI	3.8	25
33333	Jane Richards	BU	3	34
55555	Ann Costa	CI	3	34
*			0	0

→ 20

Record: 1 of 5 No Filter Search

Ready Num Lock SQL

Title: Feb 2-11:37 AM (17 of 25)

File Home Create External Data Database Tools Design ? - X

Sign in

View Run Select Make Append Update Crosstab Delete Show Table Insert Rows Insert Columns Union Pass-Through Data Definition Delete Rows Delete Columns Builder Return: All

Query Type

Tell me what you want to do... Query Setup Show/Hide

All Access Obj... <> Query1

Tables student

Queries Clandeither ClandnumCrg20 Clgr3orBUGr2 Clmajor ClnumCrg20

student

*

stuid
namz
major
gpa
numCr

CI gpa > 3
CI or numCr > 20
CI or
BU > 2

Field: stuid namz major gpa numCr
Table: student student student student student
Sort:
Show:
Criteria:
or:

Ready Num Lock SQL

File Home Create External Data Database Tools Design ? - X

View Run Select Make Append Update Crosstab Delete Data Definition Show Table Insert Rows Insert Columns Union Pass-Through Delete Rows Delete Columns Data Definition Builder Return: All

Tell me what you want to do... Sign in

All Access Obj... <> Query1

Tables student

Queries Clandeither ClandnumCgr20 Clgr3orBUGr2 Clmajor ClnumCgr20

student

* stuid namz major gpa numCr

Field: stuid namz major gpa numCr

Table: student student student student student

Sort:

Show:

Criteria: or:
"CI"
"CI"
"BU"

>3
>20
>2

Ready Num Lock SQL

11:42 AM 2/2/2017

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View Cut Copy Paste Format Painter
Views Clipboard

Filter Ascending Selection Descending Advanced Refresh All Delete More

Totals Spelling Find Replace Go To Select

Calibri (Detail) 11 Text Formatting

All Access Obj... <> x

Search... Tables Queries

student Clandeither ClandnumCrg20 Clgr3orBUgr2 Clmajor ClnumCrg20

Query1

stuid	namz	major	gpa	numCr
11111	Susan Ash	CI	4	45
12121	John Doe	BU	2.5	20
22222	Linda French	CI	3.2	30
21212	Donald Rivers	CI	3.8	25
33333	Jane Richards	BU	3	34
55555	Ann Costa	CI	3	34
*			0	0

- CI and > 3
— BU > 2
CI and > 20

Record: 14 1 of 6 No Filter Search

Ready Num Lock SQL

File Home Create External Data Database Tools Design ? - X

Sign in

View Run Select Make Append Update Crosstab Delete Show Table Insert Rows Insert Columns Union Pass-Through Data Definition Delete Rows Delete Columns Builder Return: All

Query Type

Tell me what you want to do... Query Setup Show/Hide

All Access Obj... <> Query1

Tables student

Queries Clandeither ClandnumCrg20 Clgr3orBUGr2 Clmajor ClnumCrg20

student

*
stuid
namz
major
gpa
numCr

BU
or
CI stuid gpa
>22222 >2.5

Field: stuid namz major gpa numCr
Table: student student student student student
Sort:
Show:
Criteria: or:

Ready Num Lock SQL

File Home Create External Data Database Tools Design ? - X Sign in

View Run Select Make Append Update Crosstab Delete Union Pass-Through Data Definition Insert Rows Insert Columns Delete Rows Delete Columns Builder Return: All Show Table Query Type Query Setup Show/Hide

All Access Obj... <> **Query1**

Tables student
Queries Clandeither ClandnumCrg20 Clgr3orBUGr2 Clmajor ClnumCrg20

student

*
stuid
namz
major
gpa
numCr

Field: stuid namz major gpa numCr
Table: student student student student student
Sort:
Show:
Criteria: or:
> "22222"
"BU"
"CI"
> 2.5

short text number

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File Home Create External Data Database Tools ? Sign in

Cut Copy Paste Format Painter View Refresh All Delete More

Ascending Descending Advanced Filter Remove Sort Toggle Filter

New Totals Spelling Find Replace Go To Select

Calibri (Detail) 11 Text Formatting

All Access Obj... <> x

Tables student

Queries Clandeither ClandnumCrg20 Clgr3orBUsr2 Clmajor ClnumCrg20

Query1

stuid	namz	major	gpa	numCr
12121	John Doe	BU	2.5	20
33333	Jane Richards	BU	3	34
44444	Richard Souza	CI	2.9	15
55555	Ann Costa	CI	3	34
*			0	0

Record: 1 of 4 No Filter Search

Short text number

Ready Num Lock SQL

Programming

Comments on chapter #1 in the textbox

Understand the problem

Plan logic — flowchart
Pseudocode

Code the program — SOURCE CODE

Compile or Interpret
to translate — OBJECT CODE

Test — with data

Put into production
Maintenance

