Movie database

FILE | HOME | INSERT | PAGE LAYOUT | FORMULAS | DATA | REVIEW | VIEW | DataNitro | POWER QUERY | POWERPIVOT | TEAM

A1 | ID

	A	B	C	D	E	F
1	ID	DVD_Title	Studio	Released	Status	Sound
2	1	1-900 (1994)	Fox Lorber		Discontinued	SUB
3	2	10 (Snapper Case)	Warner Brothers		Discontinued	
4	3	10 Things I Hate About You (1999)	Buena Vista		Discontinued	
5	4	100 Girls By Bunny Yeager (CAV/ Special Edition)	CAV		Out	
6	5	100 Years Of Horror (Passport Video/ Old Version/ 1997 Release)	Passport Video		Discontinued	
7	6	101 Dalmatians (1961)	Buena Vista		Discontinued	SUR
8	7	101 Dalmatians (1996)	Buena Vista		Discontinued	
9	8	10th Kingdom (Hallmark Entertainment/ Old Version)	Hallmark Entertainment		Discontinued	SUR
10	9	12 Monkeys (DTS)	Universal		Discontinued	DTS
11	10	12 Monkeys (Special Edition/ Old Version/ Dolby Digital)	Universal		Discontinued	
12	11	13th Warrior (Cancelled)	Buena Vista		Cancelled	
13	12	187 (Special Edition/ Old Version)	Warner Brothers		Discontinued	
14	13	1941 (Collector's Edition)	Universal		Out	
15	14	1998 Olympic Gold Gift Set (Box Set)	Image		Out	
16	15	1998 Olympic Hockey Highlights	Image		Out	
17	16	1998 Olympic Overall Highlights	Image		Out	
18	17	1998 Olympic Skating Competition Highlights	Image		Out	
19	18	1998 Olympic Skating Exhibition Highlights	Image		Out	
20	19	2 Days In The Valley (HBO)	HBO		Discontinued	
21	20	20,000 Leagues Under The Sea (1916/ Image)	Image		Discontinued	SIL
22	21	20,000 Leagues Under The Sea (1993)	Image		Cancelled	

Movie | Actor | Actor_Movie

READY | 100%

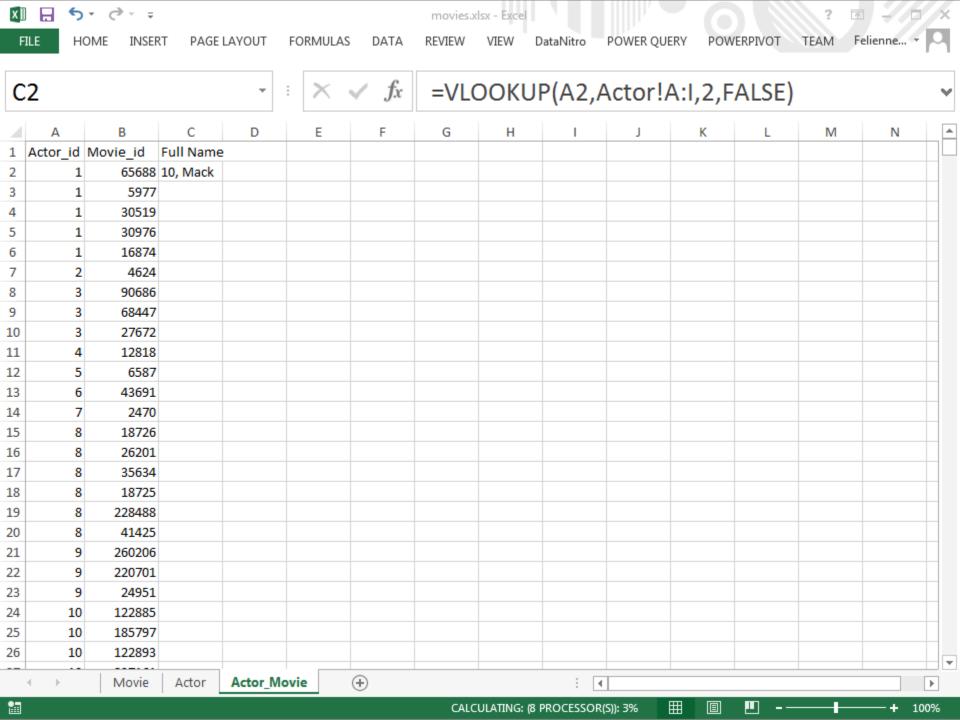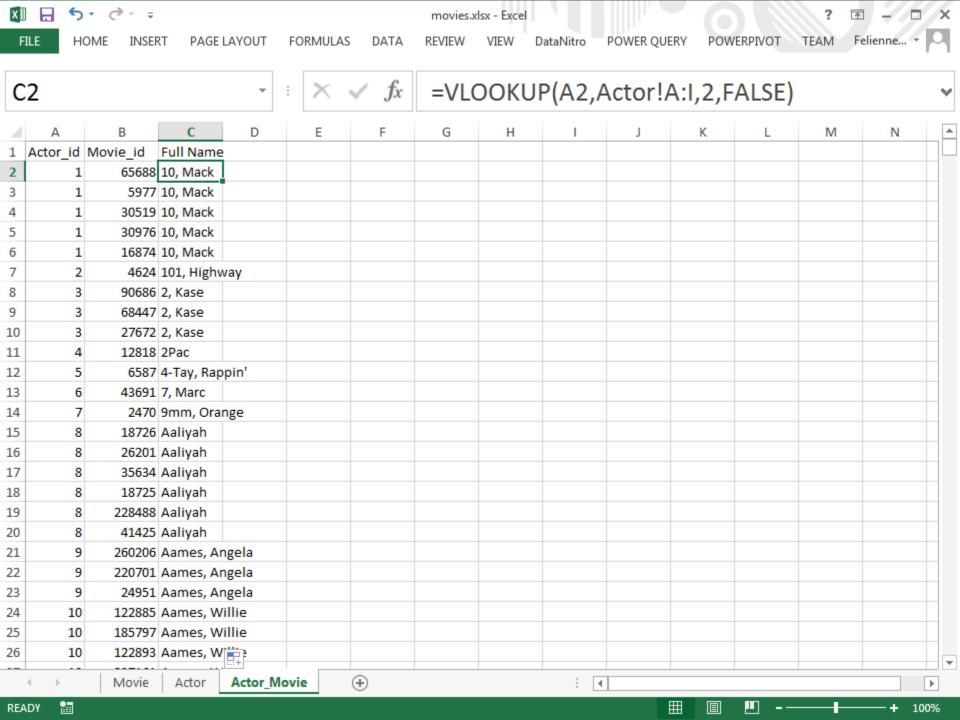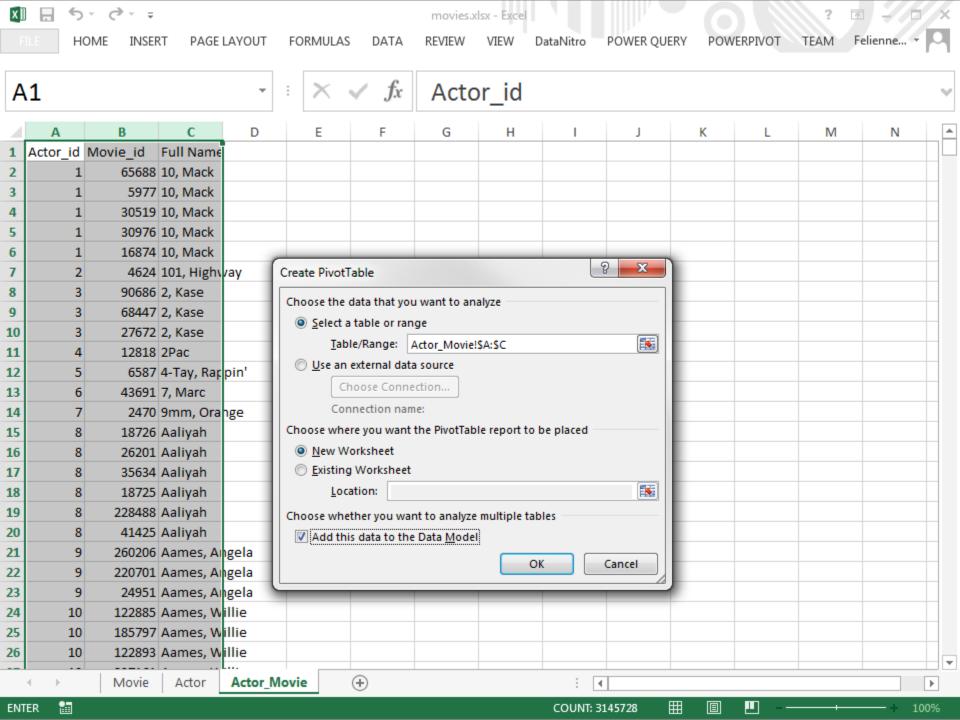|	A	B	C	D	E	F	G	H	I	J
1	Actor_id	Actor								
2	1	10, Mack								
3	2	101, Highway								
4	3	2, Kase								
5	4	2Pac								
6	5	4-Tay, Rappin'								
7	6	7, Marc								
8	7	9mm, Orange								
9	8	Aaliyah								
10	9	Aames, Angela								
11	10	Aames, Willie								
12	11	Aan, Dai Sai								
13	12	Aard, Frank J.								
14	13	Aardsma, Amanda								
15	14	Aaron, Caroline								
16	15	Aaron, Elena								
17	16	Aaron, Jack								
18	17	Aaron, Jeff								
19	18	Aaron, Terry								
20	19	Aaron, Tom								
21	20	Ab, Cyrus								
22	21	Abadie, A. C.								
23	22	Aban, Leopoldo								
24	23	Abascal, Silvia								
25	24	Abatanuomo, Diego								
26	25	Abatemarco, Tony								
27	26	Abbadie, Axelle								

Movie | Actor | Actor_Movie

Actor —0..*————0..* Movie

Many to many relation

Many to many relation

Coupled with an extra table

Actor 0..* 0..* Movie

Actor 0..* ActorMovie 0..* Movie

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Actor_id	Movie_id												
2	1	65688												
3	1	5977												
4	1	30519												
5	1	30976												
6	1	16874												
7	2	4624												
8	3	90686												
9	3	68447												
10	3	27672												
11	4	12818												
12	5	6587												
13	6	43691												
14	7	2470												
15	8	18726												
16	8	26201												
17	8	35634												
18	8	18725												
19	8	228488												
20	8	41425												
21	9	260206												
22	9	220701												
23	9	24951												
24	10	122885												
25	10	185797												
26	10	122893												

Movie | Actor | **Actor_Movie**

FILE | HOME | INSERT | PAGE LAYOUT | FORMULAS | DATA | REVIEW | VIEW | DataNitro | POWER QUERY | POWERPIVOT | TEAM | Felienne...

C2 | =VLOOKUP(A2,Actor!A:I,2,FALSE)

	A	B	C	D
1	Actor_id	Movie_id	Full Name	
2	1	65688	10, Mack	
3	1	5977		
4	1	30519		
5	1	30976		
6	1	16874		
7	2	4624		
8	3	90686		
9	3	68447		
10	3	27672		
11	4	12818		
12	5	6587		
13	6	43691		
14	7	2470		
15	8	18726		
16	8	26201		
17	8	35634		
18	8	18725		
19	8	228488		
20	8	41425		
21	9	260206		
22	9	220701		
23	9	24951		
24	10	122885		
25	10	185797		
26	10	122893		

Movie | Actor | Actor_Movie

CALCULATING: (8 PROCESSOR(S)): 3%   100%

FILE | HOME | INSERT | PAGE LAYOUT | FORMULAS | DATA | REVIEW | VIEW | DataNitro | POWER QUERY | POWERPIVOT | TEAM | Felienne...

C2 | =VLOOKUP(A2,Actor!A:I,2,FALSE)

	A	B	C	D
1	Actor_id	Movie_id	Full Name	
2	1	65688	10, Mack	
3	1	5977	10, Mack	
4	1	30519	10, Mack	
5	1	30976	10, Mack	
6	1	16874	10, Mack	
7	2	4624	101, Highway	
8	3	90686	2, Kase	
9	3	68447	2, Kase	
10	3	27672	2, Kase	
11	4	12818	2Pac	
12	5	6587	4-Tay, Rappin'	
13	6	43691	7, Marc	
14	7	2470	9mm, Orange	
15	8	18726	Aaliyah	
16	8	26201	Aaliyah	
17	8	35634	Aaliyah	
18	8	18725	Aaliyah	
19	8	228488	Aaliyah	
20	8	41425	Aaliyah	
21	9	260206	Aames, Angela	
22	9	220701	Aames, Angela	
23	9	24951	Aames, Angela	
24	10	122885	Aames, Willie	
25	10	185797	Aames, Willie	
26	10	122893	Aames, Willie	

Movie | Actor | Actor_Movie

READY | 100%

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW DataNitro POWER QUERY POWERPIVOT TEAM Felienne...

A1

Actor_id

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Actor_id	Movie_id	Full Name											
2	1	65688	10, Mack											
3	1	5977	10, Mack											
4	1	30519	10, Mack											
5	1	30976	10, Mack											
6	1	16874	10, Mack											
7	2	4624	101, Highway											
8	3	90686	2, Kase											
9	3	68447	2, Kase											
10	3	27672	2, Kase											
11	4	12818	2Pac											
12	5	6587	4-Tay, Rappin'											
13	6	43691	7, Marc											
14	7	2470	9mm, Orange											
15	8	18726	Aaliyah											
16	8	26201	Aaliyah											
17	8	35634	Aaliyah											
18	8	18725	Aaliyah											
19	8	228488	Aaliyah											
20	8	41425	Aaliyah											
21	9	260206	Aames, Angela											
22	9	220701	Aames, Angela											
23	9	24951	Aames, Angela											
24	10	122885	Aames, Willie											
25	10	185797	Aames, Willie											
26	10	122893	Aames, Willie											

Create PivotTable

Choose the data that you want to analyze

○ Select a table or range
  Table/Range: Actor_Movie!$A:$C

○ Use an external data source
  Choose Connection...
  Connection name:

Choose where you want the PivotTable report to be placed

● New Worksheet
○ Existing Worksheet
  Location:

Choose whether you want to analyze multiple tables

☑ Add this data to the Data Model

OK   Cancel

Movie   Actor   Actor_Movie

ENTER   COUNT: 3145728   100%

FILE | HOME | INSERT | PAGE LAYOUT | FORMULAS | DATA | REVIEW | VIEW | DataNitro | POWER QUERY | POWERPIVOT | TEAM | ANALYZE | DESIGN

A3

Row Labels

	A	B
3	Row Labels	Count of Movie_Id
4	10, Mack	5
5	101, Highway	1
6	2, Kase	3
7	2Pac	1
8	4-Tay, Rappin'	1
9	7, Marc	1
10	9mm, Orange	1
11	Aaliyah	6
12	Aames, Angela	3
13	Aames, Willie	25
14	Aan, Dai Sai	2
15	Aard, Frank J.	3
16	Aardsma, Amanda	4
17	Aaron, Caroline	50
18	Aaron, Elena	1
19	Aaron, Jack	2
20	Aaron, Jeff	2
21	Aaron, Terry	1
22	Aaron, Tom	4
23	Ab, Cyrus	1
24	Abadie, A. C.	1
25	Aban, Leopoldo	1
26	Abascal, Silvia	5
27	Abatanuomo, Diego	1
28	Abatemarco, Tony	5

PivotTable Fields

Choose fields to add to report:

- ☑ Actor_id
- ☑ Movie_Id
- ☑ Full Name

MORE TABLES...

Drag fields between areas below:

▼ FILTERS

Actor_id

▥ COLUMNS

≡ ROWS

Full Name

Σ VALUES

Count of Mov...

☐ Defer Layout Update   UPDATE

Movie | ActorAnalysis | Actor_Movi ...

READY

Bacon number =
Number of steps
from Kevin Bacon

	Name	Coactor	Movie	Bacon Index
1	**Name**	**Coactor**	**Movie**	**Bacon Index**
2	Kevin Bacon	Neve Cambell	Wild Things	1
3	Kevin Bacon	Bill Murray	Wild Things	
4	Bill Murray	Scarlett Johansson	Lost In Translation	
5	Scarlett Johansson	Chris Evans	the Avengers	
6	Scarlett Johansson	Morgan Freeman	Lucy	

Sheets: ... | Actor | Actor_Movie | ActorAnalysis | **BaconCalculator**

D3 | 1

	A	B	C	D	E
1	**Name**	**Coactor**	**Movie**	**Bacon Index**	
2	Kevin Bacon	Neve Cambell	Wild Things	1	
3	Kevin Bacon	Bill Murray	Wild Things	1	
4	Bill Murray	Scarlett Johansson	Lost In Translation		
5	Scarlett Johansson	Chris Evans	the Avengers		
6	Scarlett Johansson	Morgan Freeman	Lucy		

... | Actor | Actor_Movie | ActorAnalysis | **BaconCalculator**

READY

FILE | HOME | INSERT | PAGE LAYOUT | FORMULAS | DATA | REVIEW | VIEW | DataNitro | POWER QUERY | POWERPIVOT | TEAM | Felienne...

D4

=VLOOKUP(A4,

VLOOKUP(lookup_value, **table_array**, col_index_num, [range_lookup])

	A	B	C	D	J	K
1	**Name**	**Coactor**	**Movie**	**Bacon Index**		
2	Kevin Bacon	Neve Cambell	Wild Things	1		
3	Kevin Bacon	Bill Murray	Wild Things	1		
4	Bill Murray	Scarlett Johansson	Lost In Translation	)OKUP(A4,		
5	Scarlett Johansson	Chris Evans	the Avengers			
6	Scarlett Johansson	Morgan Freeman	Lucy			
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
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21						
22						
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24						
25						
26						

... | Actor | Actor_Movie | ActorAnalysis | **BaconCalculator**

ENTER | 100%

FILE   HOME   INSERT   PAGE LAYOUT   FORMULAS   DATA   REVIEW   VIEW   DataNitro   POWER QUERY   POWERPIVOT   TEAM   Felienne...

D4

=VLOOKUP(A4,B1:D6,3

VLOOKUP(lookup_value, table_array, **col_index_num**, [range_lookup])

	A	B	C	D
1	**Name**	**Coactor**	**Movie**	**Bacon Index**
2	Kevin Bacon	Neve Cambell	Wild Things	1
3	Kevin Bacon	Bill Murray	Wild Things	1
4	Bill Murray	Scarlett Johansson	Lost In Translation	(A4,B1:D6,3
5	Scarlett Johansson	Chris Evans	the Avengers	
6	Scarlett Johansson	Morgan Freeman	Lucy	

... | Actor | Actor_Movie | ActorAnalysis | **BaconCalculator**

ENTER

movies.xlsx - Excel

FILE · HOME · INSERT · PAGE LAYOUT · FORMULAS · DATA · REVIEW · VIEW · DataNitro · POWER QUERY · POWERPIVOT · TEAM · Felienne...

D4

=VLOOKUP(A4,B1:D6,3,FALSE)+1

	A	B	C	D
1	Name	Coactor	Movie	Bacon Index
2	Kevin Bacon	Neve Cambell	Wild Things	1
3	Kevin Bacon	Bill Murray	Wild Things	1
4	Bill Murray	Scarlett Johansson	Lost In Translation	6,3,FALSE)+1
5	Scarlett Johansson	Chris Evans	the Avengers	
6	Scarlett Johansson	Morgan Freeman	Lucy	

Microsoft Excel

⚠ Careful, we found one or more circular references in your workbook that might cause your formulas to calculate incorrectly.

FYI: A circular reference can be a formula that refers to its own cell value, or refers to a cell dependent on its own cell value.

[OK]   [Help]

... · Actor · Actor_Movie · ActorAnalysis · **BaconCalculator**

ENTER

Excel Options

General

Formulas

Proofing

Save

Language

Advanced

Customize Ribbon

Quick Access Toolbar

Add-Ins

Trust Center

Change options related to formula calculation, performance, and error handling.

Calculation options

Workbook Calculation ⓘ

- ○ Automatic
- ○ Automatic except for data tables
- ● Manual
  - ☐ Recalculate workbook before saving

☑ Enable iterative calculation

Maximum Iterations: `1`

Maximum Change: `0.001`

Working with formulas

- ☐ R1C1 reference style ⓘ
- ☑ Formula AutoComplete ⓘ
- ☑ Use table names in formulas
- ☑ Use GetPivotData functions for PivotTable references

Error Checking

☑ Enable background error checking

Indicate errors using this color: 🎨▾

Reset Ignored Errors

Error checking rules

- ☑ Cells containing formulas that result in an error ⓘ
- ☑ Inconsistent calculated column formula in tables ⓘ
- ☑ Cells containing years represented as 2 digits ⓘ
- ☑ Numbers formatted as text or preceded by an apostrophe ⓘ
- ☑ Formulas inconsistent with other formulas in the region ⓘ
- ☑ Formulas which omit cells in a region ⓘ
- ☑ Unlocked cells containing formulas ⓘ
- ☐ Formulas referring to empty cells ⓘ
- ☑ Data entered in a table is invalid ⓘ

OK   Cancel

D4 | =VLOOKUP(A4,B1:D6,3,FALSE)+1

	A	B	C	D
1	**Name**	**Coactor**	**Movie**	**Bacon Index**
2	Kevin Bacon	Neve Cambell	Wild Things	1
3	Kevin Bacon	Bill Murray	Wild Things	1
4	Bill Murray	Scarlett Johansson	Lost In Translation	2
5	Scarlett Johansson	Chris Evans	the Avengers	3
6	Scarlett Johansson	Morgan Freeman	Lucy	3

... Actor | Actor_Movie | ActorAnalysis | **BaconCalculator**

But how to get here?

FILE | HOME | INSERT | PAGE LAYOUT | FORMULAS | DATA | REVIEW | VIEW | DataNitro | POWER QUERY | POWERPIVOT | TEAM | Felienne...

AutoSum · Recently Used · Financial · Logical · Text · Date & Time · Name Manager · Define Name · Use in Formula · Create from Selection · Trace Precedents · Trace Dependents · Remove Arrows · Watch Window · Calculation Options

Function Library | Defined Names | Formula Auditing | Calculation

C2

=MATCH(A2,Actor_Movie!A:A,0)

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Actor_id	Actor	Movies										
2	1	10, Mack	2										
3	2	101, Highway											
4	3	2, Kase											
5	4	2Pac											
6	5	4-Tay, Rappin'											
7	6	7, Marc											
8	7	9mm, Orange											
9	8	Aaliyah											
10	9	Aames, Angela											
11	10	Aames, Willie											
12	11	Aan, Dai Sai											
13	12	Aard, Frank J.											
14	13	Aardsma, Amanda											
15	14	Aaron, Caroline											
16	15	Aaron, Elena											
17	16	Aaron, Jack											

Movie | Actor | Actor_Movie | ActorAnalysis | BaconCalcu ...

READY | CALCULATE | 100%

FILE | HOME | INSERT | PAGE LAYOUT | FORMULAS | DATA | REVIEW | VIEW | DataNitro | POWER QUERY | POWERPIVOT | TEAM | Felienne...

AutoSum · Logical · Recently Used · Text · Financial · Date & Time

Insert Function · Name Manager · Define Name · Use in Formula · Create from Selection

Trace Precedents · Trace Dependents · Remove Arrows · Watch Window · Calculation Options

Function Library | Defined Names | Formula Auditing | Calculation

D2

=MATCH(A2,

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Actor_id	Actor	Movies										
2	1	10, Mack	2	=MATCH(A2,									
3	2	101, Highway		MATCH(lookup_value, **lookup_array**, [match_type])									
4	3	2, Kase											
5	4	2Pac											
6	5	4-Tay, Rappin'											
7	6	7, Marc											
8	7	9mm, Orange											
9	8	Aaliyah											
10	9	Aames, Angela											
11	10	Aames, Willie											
12	11	Aan, Dai Sai											
13	12	Aard, Frank J.											
14	13	Aardsma, Amanda											
15	14	Aaron, Caroline											
16	15	Aaron, Elena											
17	16	Aaron, Jack											

Movie | Actor | Actor_Movie | ActorAnalysis | BaconCalcu ...

ENTER | CALCULATE | 100%

FILE | HOME | INSERT | PAGE LAYOUT | FORMULAS | DATA | REVIEW | VIEW | DataNitro | POWER QUERY | POWERPIVOT | TEAM | Felienne...

Insert Function | AutoSum | Recently Used | Financial | Logical | Text | Date & Time | Name Manager | Define Name | Use in Formula | Create from Selection | Trace Precedents | Trace Dependents | Remove Arrows | Watch Window | Calculation Options

Function Library | Defined Names | Formula Auditing | Calculation

D2

=MATCH(A2,INDIRECT("Actor_movie!A"&C2+1&":A1048576"),0)

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Actor_id	Actor	Movies										
2	1	10, Mack	2	1									
3	2	101, Highway											
4	3	2, Kase											
5	4	2Pac											
6	5	4-Tay, Rappin'											
7	6	7, Marc											
8	7	9mm, Orange											
9	8	Aaliyah											
10	9	Aames, Angela											
11	10	Aames, Willie											
12	11	Aan, Dai Sai											
13	12	Aard, Frank J.											
14	13	Aardsma, Amanda											
15	14	Aaron, Caroline											
16	15	Aaron, Elena											
17	16	Aaron, Jack											
18	17	Aaron, Jeff											
19	18	Aaron, Terry											
20	19	Aaron, Tom											

Movie | Actor | Actor_Movie | ActorAnalysis | BaconCalcu ...

READY | CALCULATE | 100%

FILE | HOME | INSERT | PAGE LAYOUT | FORMULAS | DATA | REVIEW | VIEW | DataNitro | POWER QUERY | POWERPIVOT | TEAM

Insert Function | AutoSum | Logical | Recently Used | Text | Financial | Date & Time | Name Manager | Define Name | Use in Formula | Create from Selection | Trace Precedents | Trace Dependents | Remove Arrows | Watch Window | Calculation Options

Function Library | Defined Names | Formula Auditing | Calculation

D2

=MATCH(A2,INDIRECT("Actor_movie!A"&C2+1&":A1048576"),0)+C2

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Actor_id	Actor	Movies										
2	1	10, Mack	2	3									
3	2	101, Highway											
4	3	2, Kase											
5	4	2Pac											
6	5	4-Tay, Rappin'											
7	6	7, Marc											
8	7	9mm, Orange											
9	8	Aaliyah											
10	9	Aames, Angela											
11	10	Aames, Willie											
12	11	Aan, Dai Sai											
13	12	Aard, Frank J.											
14	13	Aardsma, Amanda											
15	14	Aaron, Caroline											
16	15	Aaron, Elena											
17	16	Aaron, Jack											
18	17	Aaron, Jeff											
19	18	Aaron, Terry											
20	19	Aaron, Tom											
21	20	Ab, Gyrus											

Movie | Actor | Actor_Movie | ActorAnalysis | BaconCalcu ...

READY | CALCULATE

Use MATCH to detect similar movies in list

	10, Mack	101, Highway	2, Kase	2Pac	4-Tay, Rappin'	7, Marc	9mm, Orange	Aaliyah	Aames, Angela A
10, Mack									
101, Highway			x						
2, Kase				x					
2Pac	x			x					
4-Tay, Rappin'							x		
7, Marc		x							
9mm, Orange									
Aaliyah									
Aames, Angela									
Aames, Willie			x						
Aan, Dai Sai									
Aard, Frank J.								x	
Aardsma, Amanda		x				x			
Aaron, Caroline									
Aaron, Elena			x						
Aaron, Jack									
Aaron, Jeff	x			x				x	
Aaron, Terry									
Aaron, Tom									

Sheet tabs: Actor | ActorMatrix | Pivot | List | Actor_Movie | Actor/ ...

Cell reference: A5 — 10, Mack

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1																						
2																						
3	Count of Value	Column La																				
4	Row Labels	10, Mack	101, High	2, Ka	2Pa	4-Tay, Rap	7, Ma	9mm, Oran	Aaliy	Aamer, Ang	Aamer, Wil	Aan, Dai	Aard, Fran	Aardsma, Ama	Aaron, Cara	Aaron, El	Aaron, J	Aaron, J	Ta Aaron	T Ab	Cyr Abadie	
5	10, Mack																					
6	101, Highway				1																	
7	2, Kare							1														
8	2Pac		1		1																	
9	4-Tay, Rappin'								1													
10	7, Marc			1																		
11	9mm, Orange																					
12	Aaliyah																					
13	Aamer, Angela																					
14	Aamer, Willie			1																		
15	Aan, Dai Sai																					
16	Aard, Frank J.							1														
17	Aardsma, Amanda			1			1															
18	Aaron, Caroline																					
19	Aaron, Elena			1																		
20	Aaron, Jack																					
21	Aaron, Jeff		1		1			1														
22	Aaron, Terry																					
23	Aaron, Tom																					
24	Ab, Cyrus																					
25	Abadie, A. C.																					
26	Aban, Leopoldo																					
27	Abarcal, Silvia																					
28	Abatanuama, Diego																					
29	Abatemarco, Tony																					
30	Abbadie, Axelle																					
31	Abbananto, Sean																					
32	Abbar, Hiyam																					
33	Abbass, Hiam																					
34	Abbati, Stefano																					
35	Abbe, Jack Yutaka																					
36	Abbott, Bruce																					
37	Abbott, Bud																					
38	Abbott, Diahnne																					
39	Abbott, Eric																					
40	Abbott, Gavin																					
41	Grand Total		2	2	3	2		1	1	2	1											
42																						

Sheet tabs: Actor | ActorMatrix | Pivot | List | Actor_Movie | Actor...
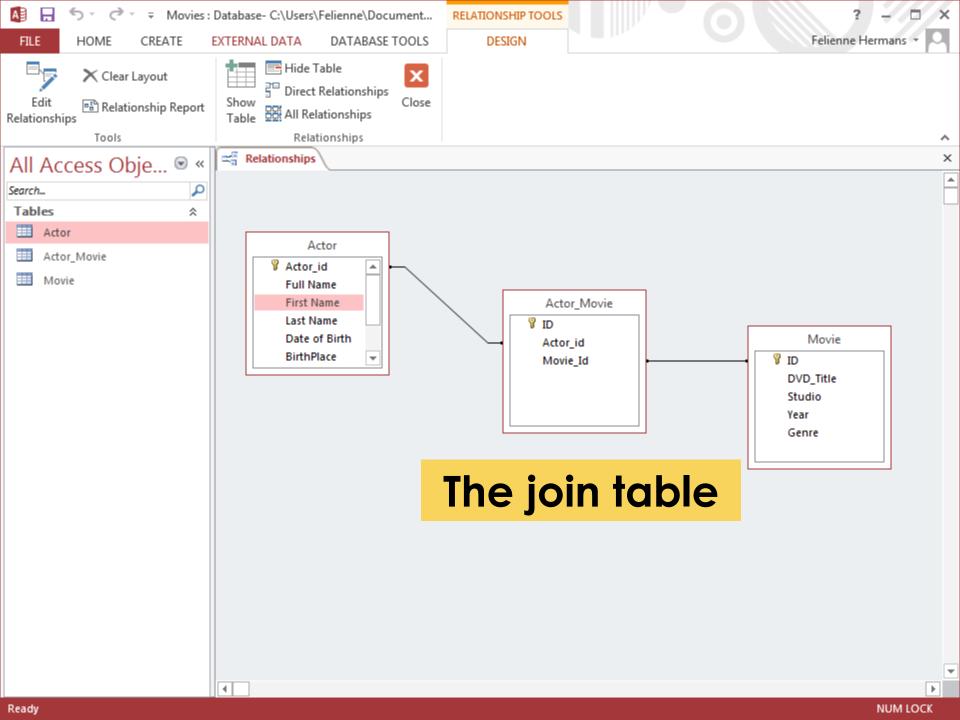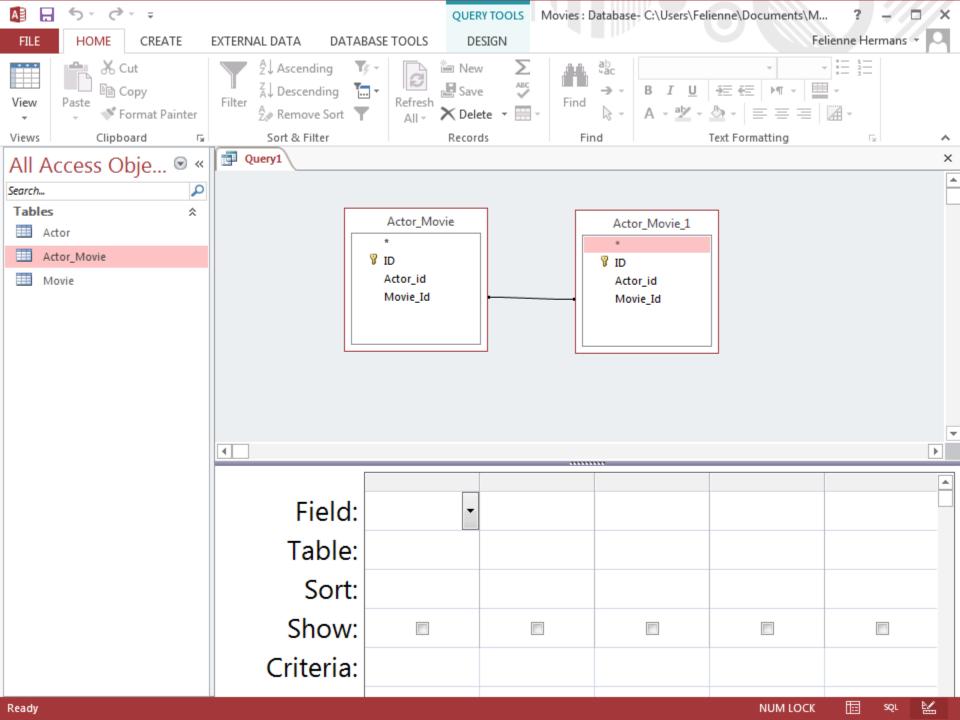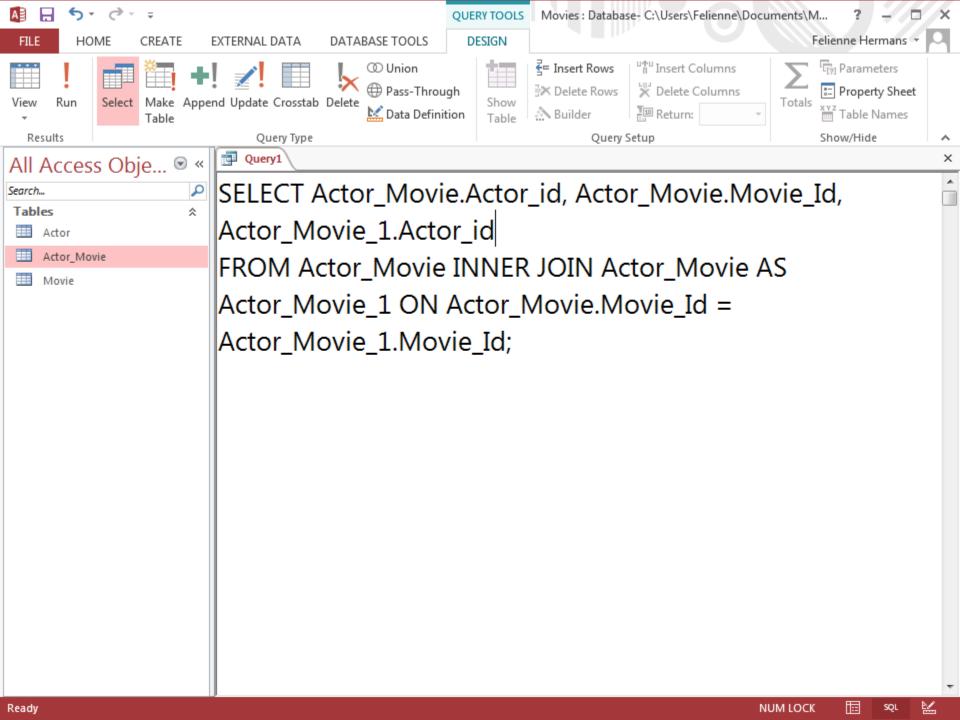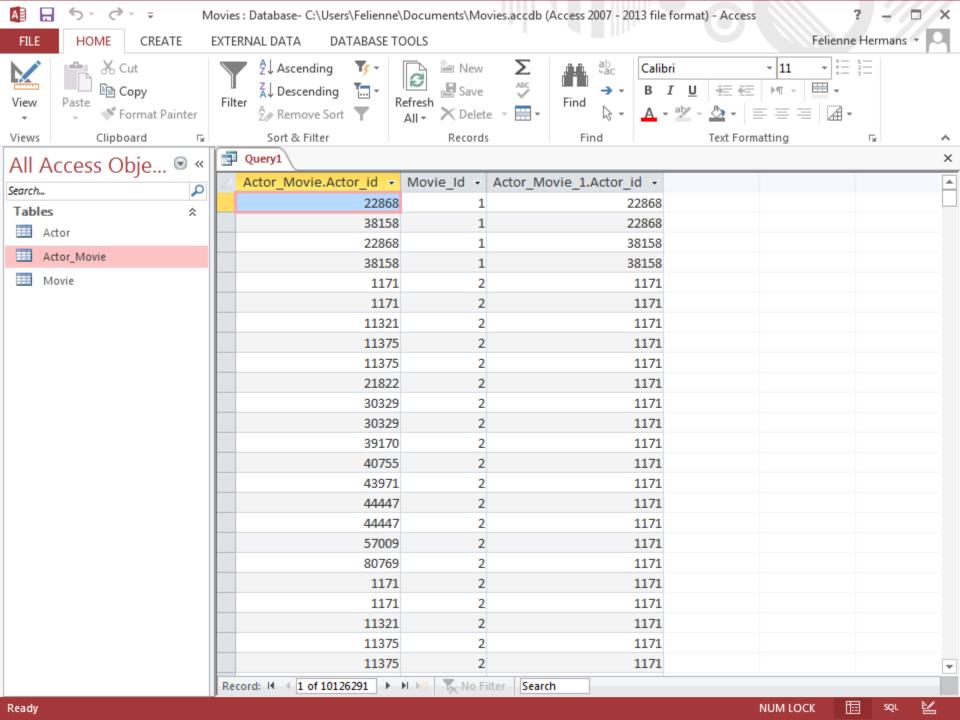
READY   CALCULATE   50%

Lots of manual labor...

Dring dring!
The no Excel alarm!

Don't paste!

Use a...

DATA

BASE

TABLE TOOLS

FILE | HOME | CREATE | EXTERNAL DATA | DATABASE TOOLS | FIELDS | TABLE

Felienne Hermans

AB
Short Text

12
Number

Currency

Date & Time
Yes/No
More Fields

Delete

Name & Caption
Default Value
Field Size

Modify Lookups
Modify Expression
Memo Settings

Formatting

Formatting
$ % , .0 .00

Required
Unique
Indexed

Validation

Views | Add & Delete | Properties | Formatting | Field Validation

All Access Obje...

Search...

Tables

Table1

Table1

ID	Click to Add
* (New)	

Record: |◄ ◄ 1 of 1 ► ►| ►* No Filter Search

Datasheet View

NUM LOCK

Movies : Database- C:\Users\Felienne\Documents\M...

Felienne Hermans

FILE | HOME | CREATE | EXTERNAL DATA | DATABASE TOOLS | DESIGN

View

Paste

Cut
Copy
Format Painter

Views | Clipboard

Filter

Ascending
Descending
Remove Sort

Sort & Filter

New
Save
Delete

Records

Find

Find

B I U

A

Text Formatting

All Access Obje...

Search...

Tables

Actor

Actor_Movie

Movie

Query1

Actor_Movie
*
ID
Actor_id
Movie_Id

Actor_Movie_1
*
ID
Actor_id
Movie_Id

Field:

Table:

Sort:

Show:

Criteria:

Ready

NUM LOCK

SQL

FILE   HOME   CREATE   EXTERNAL DATA   DATABASE TOOLS   DESIGN

Felienne Hermans ▼

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

Results   Query Type   Query Setup   Show/Hide

All Access Obje...

Search...

Tables

Actor

Actor_Movie

Movie

Query1

SELECT Actor_Movie.Actor_id, Actor_Movie.Movie_Id, Actor_Movie_1.Actor_id

FROM Actor_Movie INNER JOIN Actor_Movie AS Actor_Movie_1 ON Actor_Movie.Movie_Id = Actor_Movie_1.Movie_Id;

FILE | HOME | CREATE | EXTERNAL DATA | DATABASE TOOLS

Felienne Hermans

View | Paste | Cut | Copy | Format Painter | Clipboard

Filter | Ascending | Descending | Remove Sort | Sort & Filter

Refresh All | New | Save | Delete | Records

Find | Find

Calibri | 11 | B | I | U | Text Formatting

Views

All Access Obje...

Search...

Tables

- Actor
- Actor_Movie
- Movie

Query1

Actor_Movie.Actor_id	Movie_Id	Actor_Movie_1.Actor_id
22868	1	22868
38158	1	22868
22868	1	38158
38158	1	38158
1171	2	1171
1171	2	1171
11321	2	1171
11375	2	1171
11375	2	1171
21822	2	1171
30329	2	1171
30329	2	1171
39170	2	1171
40755	2	1171
43971	2	1171
44447	2	1171
44447	2	1171
57009	2	1171
80769	2	1171
1171	2	1171
1171	2	1171
11321	2	1171
11375	2	1171
11375	2	1171

Record: 1 of 10126291 | No Filter | Search

Ready | NUM LOCK | SQL

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

Results   Query Type   Query Setup   Show/Hide

All Access Obje...

Search...

Tables

Actor

Actor_Movie

Movie

Query1

SELECT Actor_Movie.Actor_id, Actor_Movie.Movie_Id, Actor_Movie_1.Actor_id
FROM Actor_Movie INNER JOIN Actor_Movie AS Actor_Movie_1 ON Actor_Movie.Movie_Id = Actor_Movie_1.Movie_Id;

FILE   HOME   CREATE   EXTERNAL DATA   DATABASE TOOLS   DESIGN

Felienne Hermans

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

Results   Query Type   Query Setup   Show/Hide

All Access Obje...

Search...

Tables
- Actor
- Actor_Movie
- Movie

Query1

```
SELECT Actor_Movie.Actor_id, Actor_Movie.Movie_Id,
Actor_Movie_1.Actor_id
FROM Actor_Movie INNER JOIN
Actor_Movie AS Actor_Movie_1 ON
Actor_Movie.Movie_Id = Actor_Movie_1.Movie_Id
AND Actor_Movie.Actor_ID <> Actor_Movie_1.Actor_ID;
```

Ready   NUM LOCK   SQL

FILE | HOME | CREATE | EXTERNAL DATA | DATABASE TOOLS

Felienne Hermans

Views | Clipboard | Sort & Filter | Records | Find | Text Formatting

All Access Obje...

Search...

Tables

- Actor
- Actor_Movie
- Movie

Query1

Actor_Movie.Actor_id	Movie_Id	Actor_Movie_1.Actor_id
22868	1	38158
38158	1	22868
40755	2	30329
1171	2	30329
1171	2	30329
80769	2	30329
11375	2	30329
11321	2	30329
11375	2	30329
44447	2	30329
44447	2	30329
57009	2	30329
21822	2	30329
39170	2	30329
43971	2	30329
40755	2	30329
1171	2	30329
1171	2	30329
80769	2	30329
11375	2	30329
11321	2	30329
11375	2	30329
44447	2	30329
44447	2	30329

Record: 1

No Filter | Search

Ready

NUM LOCK | SQL

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

Results | Query Type | Query Setup | Show/Hide

All Access Obje...

Search...

Tables

Actor

Actor_Movie

Movie

Query1

SELECT Actor_Movie.Actor_id, Actor_Movie.Movie_Id, Actor_Movie_1.Actor_id

FROM Actor_N

Actor_Movie A

Actor_Movie.N_____1.Movie_Id

AND Actor_Movie.Actor_ID <> Actor_Movie_1.Actor_ID;

Save As

Query Name:

OneStep

OK | Cancel

Ready | NUM LOCK | SQL

We can use a 'view' as a table in a query

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

Results Query Type Query Setup Show/Hide

All Access Obje...

Search...

Tables

Actor

Actor_Movie

Movie

Queries

OneStep

Query1

```
SELECT *
FROM OneStep
where actor_id = 2083;
```

Query1

Actor_id	Movie_Id	CoActor_id
2083	248696	274
2083	14023	274
2083	157405	291
2083	255592	291
2083	52227	291
2083	41308	291
2083	8136	291
2083	35571	291
2083	41804	292
2083	157183	542
2083	260224	700
2083	260262	700
2083	34094	700
2083	75239	700
2083	4156	700
2083	159684	700
2083	221678	700
2083	247109	700
2083	141569	700
2083	29640	700
2083	89242	700
2083	29637	700
2083	141669	700
2083	225648	700

All Access Obje...

Search...

Tables
- Actor
- Actor_Movie
- Movie

Queries
- OneStep

Record: 1 of 2220   No Filter   Search

Ready   NUM LOCK

FILE | HOME | CREATE | EXTERNAL DATA | DATABASE TOOLS

Felienne Hermans

View | Paste | Cut | Copy | Format Painter | Filter | Ascending | Descending | Remove Sort | Refresh All | New | Save | Delete | Find | Calibri | 11 | B | I | U

Views | Clipboard | Sort & Filter | Records | Find | Text Formatting

All Access Obje...

Search...

Tables
- Actor
- Actor_Movie
- Movie

Queries
- OneStep

Query1

Actor_id	Movie_Id	DVD_Title	CoActor_id	Actor
2083	248696	White Water Summer (Image)	274	Adler, Matt
2083	14023	White Water Summer (Columbia	274	Adler, Matt
2083	8136	Boiler Room (2000/ New Line/ Pl	291	Affleck, Ben
2083	41308	Boiler Room (2000/ New Line/ Pl	291	Affleck, Ben
2083	255592	Boiler Room (2000/ New Line/ Bl	291	Affleck, Ben
2083	52227	Warner Drama 10-Pack: The Boile	291	Affleck, Ben
2083	35571	Boiler Room (2000/ New Line/ Pl	291	Affleck, Ben
2083	157405	Boiler Room (2000/ Alliance Atla	291	Affleck, Ben
2083	41804	Lemon Sky	292	Affleck, Casey
2083	157183	Taking Chance	542	Aldredge, Tom
2083	225681	National Lampoon's Animal Hous	700	Allen, Karen
2083	4157	National Lampoon's Animal Hous	700	Allen, Karen
2083	225648	National Lampoon's Animal Hous	700	Allen, Karen
2083	255330	National Lampoon's Animal Hous	700	Allen, Karen
2083	206807	National Lampoon's Animal Hous	700	Allen, Karen
2083	29637	National Lampoon's Animal Hous	700	Allen, Karen
2083	260086	National Lampoon's Animal Hous	700	Allen, Karen
2083	20626	National Lampoon's Animal Hous	700	Allen, Karen
2083	37712	National Lampoon's Animal Hous	700	Allen, Karen
2083	247109	National Lampoon's Animal Hous	700	Allen, Karen
2083	221678	Comedy Greats Spotlight Collecti	700	Allen, Karen
2083	159684	National Lampoon's Animal Hous	700	Allen, Karen
2083	4156	National Lampoon's Animal Hous	700	Allen, Karen
2083	75239	National Lampoon's Animal Hous	700	Allen, Karen

Record: 1 of 2220 | No Filter | Search

Ready | NUM LOCK | SQL

FILE | HOME | CREATE | EXTERNAL DATA | DATABASE TOOLS | DESIGN   Felienne Hermans ▾

Views | Clipboard | Sort & Filter | Records | Find | Text Formatting

All Access Obje... ⊙ «

Search...

Tables ⌃
- ▦ Actor
- ▦ Actor_Movie
- ▦ Movie

Queries ⌃
- ▦ OneStep

OneStep ✕

```
SELECT Actor_Movie.Actor_id AS Actor_id,
Actor_Movie.Movie_Id, Actor_Movie_1.Actor_id AS
CoActor_id
FROM Actor_Movie INNER JOIN Actor_Movie AS
Actor_Movie_1 ON (Actor_Movie.Movie_Id =
Actor_Movie_1.Movie_Id) AND (Actor_Movie.Actor_ID <>
Actor_Movie_1.Actor_ID);
```

We should use a JOIN again for two steps, three steps

All Access Obje... ▾ «

Search...

Tables
- Actor
- Actor_Movie
- Movie

Queries
- OneStep

OneStep

```
SELECT Actor_Movie.Actor_id AS Actor_id,
Actor_Movie.Movie_Id, Actor_Movie_1.Actor_id AS
CoActor_id
FROM Actor_Movie INNER JOIN Actor_Movie AS
Actor_Movie_1 ON (Actor_Movie.Movie_Id =
Actor_Movie_1.Movie_Id) AND (Actor_Movie.Actor_ID <>
Actor_Movie_1.Actor_ID);
```

We should use a JOIN again for two steps, three steps

Can you think of any downsides?

SELECT Actor_Movie.Actor_id AS Actor_id, Actor_Movie.Movie_Id, Actor_Movie_1.Actor_id AS CoActor_id
FROM Actor_Movie INNER JOIN Actor_Movie AS Actor_Movie_1 ON (Actor_Movie.Movie_Id = Actor_Movie_1.Movie_Id) AND (Actor_Movie.Actor_ID <> Actor_Movie_1.Actor_ID);

We should use a JOIN again for two steps, three steps

Can you think of any downsides?

Exam question!

NOSQL

There are other types of databases