

File: Lab9\_dluo22.rtf  
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Class: CS 325, January 2022  
Lab: 88  
Due data: Jan. 20, 2022

### Exercise 1: Single-table query 1: Julia

```
MariaDB [dluo22]> SELECT * FROM imdb_actors WHERE first_name='Julia';
```

id	first_name	last_name	gender	film_count
572929	Julia	Carothers Hughes	F	1
770247	Julia	Roberts	F	1
784772	Julia	Schuler	F	1
806043	Julia	Sweeney	F	1

**4 rows in set (0.00 sec)**

### Exercise 2: Single-table query 2: 1995–2000

```
MariaDB [dluo22]> SELECT id,name FROM imdb_movies where year>= 1995  
AND year<=2000;
```

id	name
18979	Apollo 13
46169	Braveheart
109093	Fargo
112290	Fight Club
147603	Hollow Man
207992	Matrix, The
210511	Memento
237431	O Brother, Where Art Thou?
238695	Office Space
254943	Pi
306032	Snatch.
314965	Stir of Echoes
333856	Titanic

**13 rows in set (0.01 sec)**

### Exercise 3: Single-table query 3: Fight Club

```
MariaDB [dluo22]> SELECT actor_id FROM imdb_roles WHERE  
movie_id=112290;
```

actor_id
----------

	12508
	17438
	17946
	23488
	33024
	43967
	46793
	52396
	66495
	72356
	86866
	92815
	114701
	117395
	122803
	150046
	152175
	174382
	180149
	184634
	201013
	220339
	247608
	256240
	266368
	275713
	281243
	284337
	290848
	292815
	304444
	308329
	313126
	313969
	323403
	328405
	347943
	356562
	367572
	376249
	378974
	385911
	389753
	392786
	402498
	403180
	406971
	438105
	443594

454061
469664
471342
510575
514278
553953
558289
558382
569014
572783
589158
606081
780070
793011

+-----+

63 rows in set (0.00 sec)

#### Exercise 4: Multi-table query 1: pi

MariaDB [dluo22]> Select role from imdb\_movies join imdb\_roles on  
imdb\_movies.id = imdb\_roles.movie\_id where imdb\_movies.name = 'pi';

role
Man Delivering Suitcase
Brad
Transit Cop
Maximillian Cohen
Kabbala Scholar
Moustacheless Man
Man Presenting Suitcase
Limo Driver
Kabbala Scholar
Photographer
Sol Robeson
King Neptune
Farroukh
Rabbi Cohen
Kabbala Scholar
Kabbala Scholar
Transit Cop
Lenny Meyer
Kabbala Scholar
Jake
Ephraim
Jenny Robeson
Mrs. Ovadia
Marcy Dawson
Jenna

Jenna's Mom
Devi

28 rows in set (0.00 sec)

### Exercise 5: Multi-table query 2: Pi Actor Name

```
MariaDB [dluo22]> Select first_name,last_name,role from
-> imdb_actors a join imdb_roles r on a.id=r.actor_id
-> join imdb_movies m on m.id = r.movie_id
-> where m.name='pi';
```

first_name	last_name	role
Abraham	Aronofsky	Man Delivering Suitcase
Peter	Cheyenne	Brad
Scott	Franklin	Transit Cop
Sean	Gullette	Maximillian Cohen
Ari	Handel	Kabbala Scholar
Stanley	Herman	Moustacheless Man
J.C.	Islander	Man Presenting Suitcase
Chris (IV)	Johnson	Limo Driver
Richard	Lifschutz	Kabbala Scholar
Clint	Mansell	Photographer
Mark	Margolis	Sol Robeson
Sal	Monte	King Neptune
Ajay	Naidu	Farroukh
Stephen	Pearlman	Rabbi Cohen
Oren	Sarch	Kabbala Scholar
Lloyd	Schwartz	Kabbala Scholar
Ray	Seiden	Transit Cop
Ben (II)	Shenkman	Lenny Meyer
David	Strahlberg	Kabbala Scholar
David	Tawil	Jake
Tom (I)	Tumminello	Ephraim
Lauren (I)	Fox	Jenny Robeson
Joanne	Gordon	Mrs. Ovadia
Pamela (II)	Hart	Marcy Dawson
Kristyn Mae-Anne	Lao	Jenna
Espher Lao	Nieves	Jenna's Mom
Pam	Shoaib	
Samia	Shoaib	Devi

28 rows in set (0.00 sec)

### Exercise 6: Multi-table query 3: Kill Bill

```

MariaDB [dluo22]> Select first_name,last_name from imdb_actors a
-> join imdb_roles r1 on r1.actor_id = a.id
-> join imdb_movies m1 on m1.id = r1.movie_id
-> join imdb_roles r2 on r2.actor_id = a.id
-> join imdb_movies m2 on m2.id = r2.movie_id
-> where m1.name = 'Kill Bill: Vol. 1'
-> and m2.name = 'Kill Bill: Vol. 2';

```

first_name	last_name
David	Carradine
Chia Hui	Liu
Michael (I)	Madsen
Christopher Allen	Nelson
Michael (I)	Parks
Stevo	Polyi
Vivica A.	Fox
Daryl	Hannah
Lucy	Liu
Uma	Thurman

#### Exercise 7: More queries

- Write a query that show the top 5 actors in imdb\_small who have appeared in the most films, in descending order.

```

MariaDB [dluo22]> Select first_name,last_name,film_count from
imdb_actors order by film_count DESC limit 5;

```

first_name	last_name	film_count
Kevin	Bacon	9
Steve	Buscemi	3
Michael (I)	Madsen	3
Bill	Paxton	3
Brad	Pitt	3

5 rows in set (0.00 sec)

- Write a query that shows the top 3 most popular genres of films in imdb\_small, sorted in descending order. (Hint: There is a table movies\_genres that contains the columns movie\_id and genre that may be able to help)

```

MariaDB [dluo22]> select genre, count(*) as magnitude from
movies_genres join imdb_movies on movies_genres.movie_id =
imdb_movies.id group by genre order by magnitude DESC limit 3;

```

genre	magnitude
Thriller	17

Drama	17
Crime	12

3 rows in set (0.00 sec)

(Credits to <https://stackoverflow.com/questions/7693613/select-most-common-value-from-a-field-in-mysql>)

- Write a query that shows the name of the director who has directed the most horror films.

```
MariaDB [dluo22]> select d.first_name,d.last_name,count(*) from
directors d join movies_directors md on d.id = md.director_id join
imdb_movies m on m.id = md.movie_id join movies_genres mg on
mg.movie_id = m.id where mg.genre = 'Horror' group by
d.first_name,d.last_name order by count(*) DESC limit 1;
```

first_name	last_name	count(*)
Paul (I)	Verhoeven	1

1 row in set (0.00 sec)

#### Exercise 8: CSE 143 Grades

```
MariaDB [dluo22]> Select grade from grades g
-> join courses c on c.id = g.course_id
-> where name = 'Computer Science 143';
```

grade
C
A+
B
D-

4 rows in set (0.01 sec)

#### Exercise 9: CSE 143 Grades and Names

```
MariaDB [dluo22]> Select s.name,grade from students s join grades g on
s.id = g.student_id join courses c on c.id = g.course_id where c.name
= 'Computer Science 143' AND g.grade <= 'B-';
```

name	grade
Lisa	A+
Ralph	B

2 rows in set (0.00 sec)

### Exercise 10: All Grades

```
MariaDB [dluo22]> Select s.name,c.name,grade from students s join  
grades g on s.id = g.student_id join courses c on c.id = g.course_id  
where g.grade <= 'B-' order by s.name;
```

name	name	grade
Bart	Computer Science 142	B-
Lisa	Computer Science 143	A+
Lisa	Computer Science 190M	A+
Milhouse	Computer Science 142	B+
Ralph	Computer Science 143	B

5 rows in set (0.00 sec)

### Exercise 11: Popular Classes

```
MariaDB [dluo22]> Select DISTINCT c.name from courses c join grades g  
on c.id = g.course_id join students s on s.id = g.student_id group by  
course_id having count(course_id) >= 2;
```

name
Computer Science 142
Computer Science 143

2 rows in set (0.00 sec)