

CS3120 Database Management Systems Laboratory

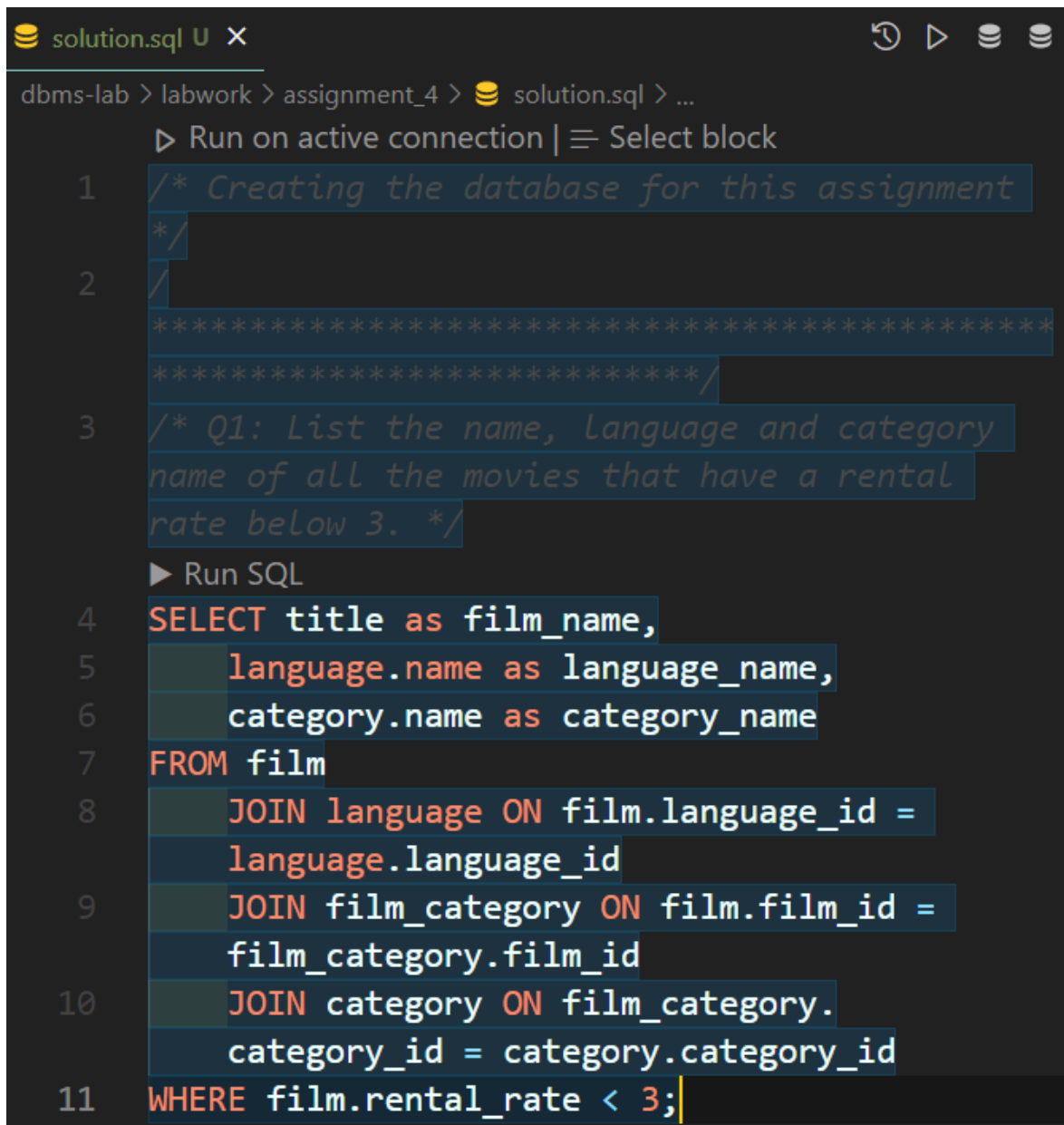
Assignment 4

Mayank Singla

111901030

Using VSCode to write the queries in a file and then execute that file from the terminal using “\i file.sql”

Q1. List the name language and category name of all the movies that have a rental rate below 3.



```
dbms-lab > labwork > assignment_4 > solution.sql > ...
▶ Run on active connection | ≡ Select block
1  /* Creating the database for this assignment
   */
2  /
   *****
   *****/
3  /* Q1: List the name, language and category
   name of all the movies that have a rental
   rate below 3. */
   ▶ Run SQL
4  SELECT title as film_name,
5         language.name as language_name,
6         category.name as category_name
7  FROM film
8         JOIN language ON film.language_id =
   language.language_id
9         JOIN film_category ON film.film_id =
   film_category.film_id
10        JOIN category ON film_category.
   category_id = category.category_id
11 WHERE film.rental_rate < 3;
```

film_name	language_name	category_name
Academy Dinosaur	English	Documentary
Adaptation Holes	English	Documentary
Affair Prejudice	English	Horror
African Egg	English	Family
Agent Truman	English	Foreign
Alabama Devil	English	Horror
Alamo Videotape	English	Foreign
Alaska Phantom	English	Music
Alice Fantasia	English	Classics
Alien Center	English	Foreign
Alley Evolution	English	Foreign
Alone Trip	English	Music
Alter Victory	English	Animation
Amadeus Holy	English	Action
Amistad Midsummer	English	New
Anaconda Confessions	English	Animation
Analyze Hoosiers	English	Horror
Angels Life	English	New
Annie Identity	English	Sci-Fi
Anonymous Human	English	Sports
Antitrust Tomatoes	English	Action
Anything Savannah	English	Horror
Apollo Teen	English	Drama
Arabia Dogma	English	Horror
:		

Watership Frontier	English	Horror
Wedding Apollo	English	Documentary
Weekend Personal	English	Sci-Fi
Westward Seabiscuit	English	Classics
Wild Apollo	English	New
Willow Tracy	English	Family
Wind Phantom	English	Games
Window Side	English	Travel
Wisdom Worker	English	Comedy
Wolves Desire	English	Travel
Women Dorado	English	Action
Won Dares	English	Music
Wonderful Drop	English	Foreign
Wonka Sea	English	Animation
Words Hunter	English	Music
Worker Tarzan	English	Travel
World Leathernecks	English	Horror
Worst Banger	English	Action
Wrath Mile	English	Documentary
Wrong Behavior	English	Children
Young Language	English	Documentary
Youth Kick	English	Music
Zhivago Core	English	Horror
Zoolander Fiction	English	Children

(664 rows)

(END)

Q2. List the name of all movies acted by the actors with the first name 'Burt'. Also, display the last name of the actor in each row.

```
dbms-lab > labwork > assignment_4 > solution.sql > ...
12  /
    *****
    *****/
13  /* Q2: List the name of all movies acted by
    the actors with first name ' Burt ' also
    display the last name of the actor in each
    row. */
    ► Run SQL
14  SELECT title,
15         last_name
16  FROM film
17         JOIN film_actor ON film.film_id =
    film_actor.film_id
18         JOIN actor ON film_actor.actor_id = actor.
    actor_id
19  WHERE first_name = 'Burt';
```

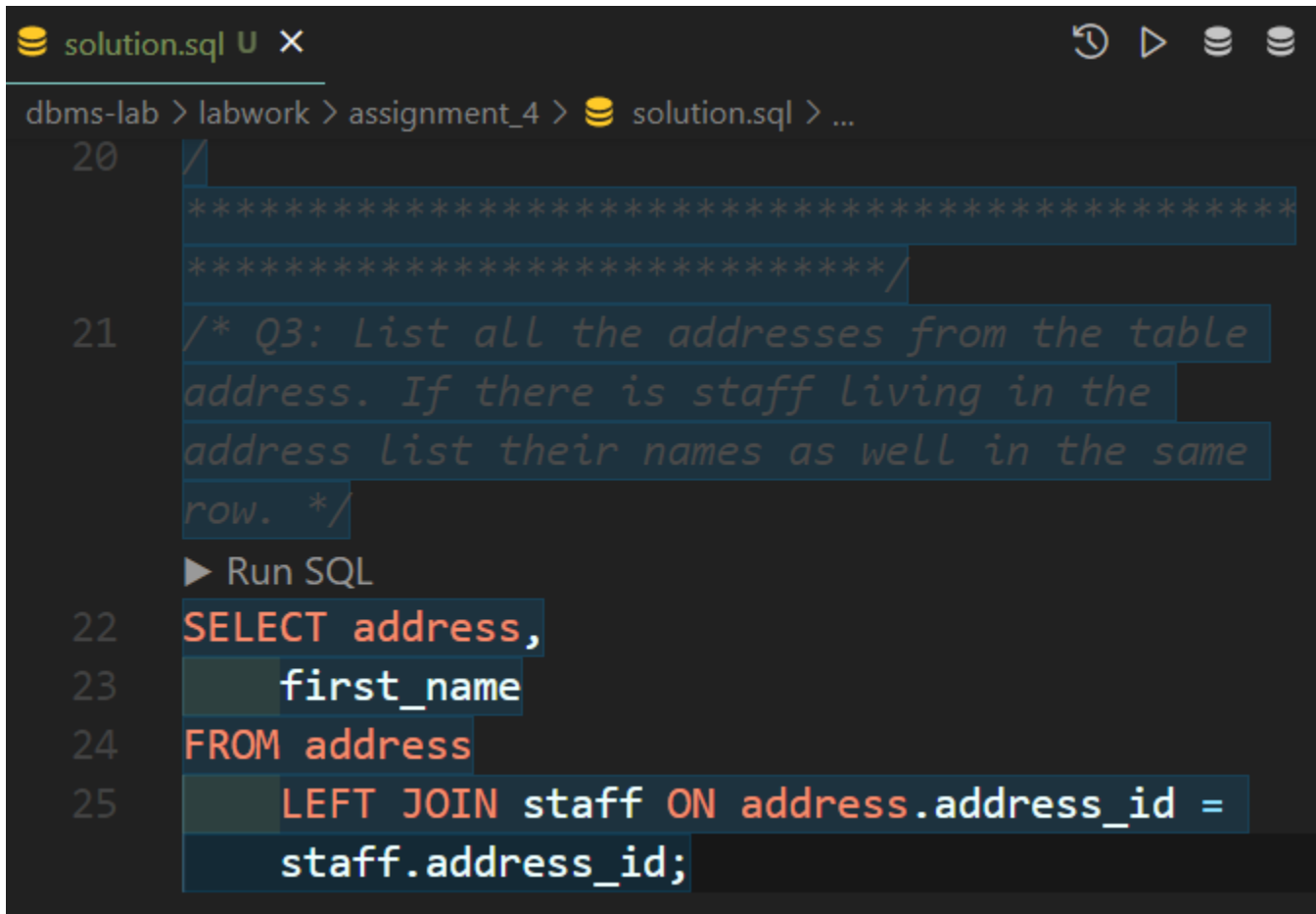
title	last_name
-----+-----	
Alien Center	Dukakis
Blindness Gun	Dukakis
Commandments Express	Dukakis
Dinosaur Secretary	Dukakis
Double Wrath	Dukakis
Ending Crowds	Dukakis
Greek Everyone	Dukakis
Grinch Massage	Dukakis
Gun Bonnie	Dukakis
Guys Falcon	Dukakis
Heaven Freedom	Dukakis
Home Pity	Dukakis
Homeward Cider	Dukakis
Image Princess	Dukakis
Intolerable Intentions	Dukakis
Jerk Paycheck	Dukakis
Kane Exorcist	Dukakis
King Evolution	Dukakis
Menagerie Rushmore	Dukakis
Money Harold	Dukakis
Motions Details	Dukakis
Random Go	Dukakis
Range Moonwalker	Dukakis
Reap Unfaithful	Dukakis
:	

Unbreakable Karate	Posey
Attacks Hate	Temple
Blanket Beverly	Temple
Bucket Brotherhood	Temple
Butterfly Chocolat	Temple
Caper Motions	Temple
Chicago North	Temple
Coast Rainbow	Temple
Evolution Alter	Temple
Gathering Calendar	Temple
Gilmore Boiled	Temple
Grapes Fury	Temple
Heavyweights Beast	Temple
Insider Arizona	Temple
Pollock Deliverance	Temple
Racer Egg	Temple
Roses Treasure	Temple
Sleuth Orient	Temple
Spiking Element	Temple
Spoilers Hellfighters	Temple
Straight Hours	Temple
Varsity Trip	Temple
Wait Cider	Temple
Wars Pluto	Temple

(76 rows)

(END)

Q3. List all the addresses from the table address. If there is staff living in the address list their names as well in the same row.



The screenshot shows a SQL IDE window titled 'solution.sql'. The breadcrumb path is 'dbms-lab > labwork > assignment_4 > solution.sql > ...'. The editor contains a SQL query for Q3. Line 20 has a comment separator. Line 21 has a multi-line comment describing the query. Line 22 starts the SQL query with 'SELECT address,'. Line 23 continues with 'first_name'. Line 24 continues with 'FROM address'. Line 25 continues with 'LEFT JOIN staff ON address.address_id =' and the next line continues with 'staff.address_id;'. There is a 'Run SQL' button below the comment on line 21.

```
20  /
    ****
    ****/
21  /* Q3: List all the addresses from the table
    address. If there is staff living in the
    address list their names as well in the same
    row. */
    ► Run SQL
22  SELECT address,
23         first_name
24  FROM address
25  LEFT JOIN staff ON address.address_id =
    staff.address_id;
```

address	first_name
47 MySakila Drive	
28 MySQL Boulevard	
23 Workhaven Lane	Mike
1411 Lillydale Drive	Jon
1913 Hanoi Way	
1121 Loja Avenue	
692 Joliet Street	
1566 Inegl Manor	
53 Idfu Parkway	
1795 Santiago de Compostela Way	
900 Santiago de Compostela Parkway	
478 Joliet Way	
613 Korolev Drive	
1531 Sal Drive	
1542 Tarlac Parkway	
808 Bhopal Manor	
270 Amroha Parkway	
770 Bydgoszcz Avenue	
419 Iligan Lane	
360 Toulouse Parkway	
270 Toulon Boulevard	
320 Brest Avenue	
1417 Lancaster Avenue	
1688 Okara Way	
:	

1568 Celaya Parkway	
1489 Kakamigahara Lane	
1819 Alessandria Loop	
1208 Tama Loop	
951 Springs Lane	
760 Miyakonojo Drive	
966 Asuncin Way	
1584 Ljubertsy Lane	
247 Jining Parkway	
773 Dallas Manor	
1923 Stara Zagora Lane	
1402 Zanzibar Boulevard	
1464 Kursk Parkway	
1074 Sanaa Parkway	
1759 Niznekamsk Avenue	
32 Liaocheng Way	
42 Fontana Avenue	
1895 Zhezqazghan Drive	
1837 Kaduna Parkway	
844 Bucuresti Place	
1101 Bucuresti Boulevard	
1103 Quilmes Boulevard	
1331 Usak Boulevard	
1325 Fukuyama Street	

(603 rows)

(END)

Q4. Create a view with the First name, last name, email, phone number, and address of all active customers with store id 1.

```
dbms-lab > labwork > assignment_4 > solution.sql > ...
```

```
26  /
    *****
    *****/
27  /* Q4: Create a view with the First name,
    last name, email, phone number and address of
    all active customers with store id 1. */
    ► Run SQL
28  CREATE VIEW lab_4_customer_view AS
29  SELECT first_name,
30         last_name,
31         email,
32         phone,
33         address
34  FROM customer
35       JOIN address on customer.address_id =
                       address.address_id
36  WHERE customer.active = 1
37       AND customer.store_id = 1;
```

```
dvdrental=# \i solution.sql
CREATE VIEW
dvdrental=# |
```

```
dvdrental=# SELECT * FROM lab_4_customer_view;
```

first_name	last_name	email	phone	address
Jared	Ely	jared.ely@sakilacustomer.org	35533115997	1003 Qinhuangdao Street
Mary	Smith	mary.smith@sakilacustomer.org	28303384290	1913 Hanoi Way
Patricia	Johnson	patricia.johnson@sakilacustomer.org	838635286649	1121 Loja Avenue
Linda	Williams	linda.williams@sakilacustomer.org	448477190408	692 Joliet Street
Elizabeth	Brown	elizabeth.brown@sakilacustomer.org	10655648674	53 Idfu Parkway
Maria	Miller	maria.miller@sakilacustomer.org	716571220373	900 Santiago de Compostela Parkway
Dorothy	Taylor	dorothy.taylor@sakilacustomer.org	648856936185	1531 Sal Drive
Nancy	Thomas	nancy.thomas@sakilacustomer.org	465887807014	808 Bhopal Manor
Helen	Harris	helen.harris@sakilacustomer.org	990911107354	419 Iligan Lane
Donna	Thompson	donna.thompson@sakilacustomer.org	407752414682	270 Toulon Boulevard
Ruth	Martinez	ruth.martinez@sakilacustomer.org	272572357893	1417 Lancaster Avenue
Michelle	Clark	michelle.clark@sakilacustomer.org	892775750063	262 A Corua (La Corua) Parkway
Laura	Rodriguez	laura.rodriguez@sakilacustomer.org	161968374323	28 Charlotte Amalie Street
Deborah	Walker	deborah.walker@sakilacustomer.org	196495945706	934 San Felipe de Puerto Plata Street
Cynthia	Young	cynthia.young@sakilacustomer.org	678220867005	1425 Shikarpur Manor
Melissa	King	melissa.king@sakilacustomer.org	525255540978	1668 Anpolis Street
Amy	Lopez	amy.lopez@sakilacustomer.org	627705991774	176 Mandaluyong Place
Pamela	Baker	pamela.baker@sakilacustomer.org	912257250465	1440 Fukuyama Loop
Martha	Gonzalez	martha.gonzalez@sakilacustomer.org	489783829737	269 Cam Ranh Parkway
Debra	Nelson	debra.nelson@sakilacustomer.org	378318851631	306 Antofagasta Place
Stephanie	Mitchell	stephanie.mitchell@sakilacustomer.org	42384721397	42 Brindisi Place
Marie	Turner	marie.turner@sakilacustomer.org	177727722820	1998 Halifax Drive
Janet	Phillips	janet.phillips@sakilacustomer.org	675292816413	1718 Valencia Street
Frances	Parker	frances.parker@sakilacustomer.org	69493378813	686 Garland Manor
Ann	Evans	ann.evans@sakilacustomer.org	705800322606	909 Garland Manor

Allan	Cornish	allan.cornish@sakilacustomer.org	50898428626	947 Trshavn Place
Nelson	Christenson	nelson.christenson@sakilacustomer.org	84794532510	1764 Jalib al-Shuyukh Parkway
Max	Pitt	max.pitt@sakilacustomer.org	698182547686	1917 Kumbakonam Parkway
Dwayne	Olvera	dwayne.olvera@sakilacustomer.org	62127829280	1447 Imus Place
Dwight	Lombardi	dwight.lombardi@sakilacustomer.org	368738360376	1497 Fengshan Drive
Felix	Gaffney	felix.gaffney@sakilacustomer.org	107092893983	1059 Yuncheng Avenue
Jordan	Archuleta	jordan.archuleta@sakilacustomer.org	817740355461	1229 Varanasi (Benares) Manor
Wallace	Slone	wallace.slone@sakilacustomer.org	946114054231	1342 Sharja Way
Casey	Mena	casey.mena@sakilacustomer.org	525518075499	539 Hami Way
Sidney	Burleson	sidney.burleson@sakilacustomer.org	867287719310	1405 Hagonoy Avenue
Byron	Box	byron.box@sakilacustomer.org	844018348565	521 San Juan Bautista Tuxtepec Place
Ross	Grey	ross.grey@sakilacustomer.org	165164761435	951 Springs Lane
Virgil	Wofford	virgil.wofford@sakilacustomer.org	294449058179	760 Miyakonojo Drive
Marshall	Thorn	marshall.thorn@sakilacustomer.org	285710089439	1584 Ljubertsy Lane
Perry	Swafford	perry.swafford@sakilacustomer.org	914466027044	773 Dallas Manor
Kirk	Stclair	kirk.stclair@sakilacustomer.org	182178609211	1923 Stara Zagora Lane
Sergio	Stanfield	sergio.stanfield@sakilacustomer.org	387448063440	1402 Zanzibar Boulevard
Marion	Ocampo	marion.ocampo@sakilacustomer.org	338758048786	1464 Kursk Parkway
Tracy	Herrmann	tracy.herrmann@sakilacustomer.org	154124128457	1074 Sanaa Parkway
Kent	Arsenault	kent.arsenault@sakilacustomer.org	410877354933	32 Liaocheng Way
Eduardo	Hiatt	eduardo.hiatt@sakilacustomer.org	640843562301	1837 Kaduna Parkway
Terrence	Gunderson	terrence.gunderson@sakilacustomer.org	935952366111	844 Bucuresti Place
Enrique	Forsythe	enrique.forsythe@sakilacustomer.org	199514580428	1101 Bucuresti Boulevard
Freddie	Duggan	freddie.duggan@sakilacustomer.org	644021380889	1103 Quilmes Boulevard
Wade	Delvalle	wade.delvalle@sakilacustomer.org	145308717464	1331 Usak Boulevard

(318 rows)

(END)

Q5. Create a view with film name, category name, and language. List all rows from this view.

```
dbms-lab > labwork > assignment_4 > solution.sql > ...  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49
```

```
*****  
*****/  
/* Q5: Create a view with film name, category  
name and language. List all rows from this  
view. */  
▶ Run SQL  
CREATE VIEW lab_4_film_view AS  
SELECT title as film_name,  
       language.name as language_name,  
       category.name as category_name  
FROM film  
       JOIN language ON film.language_id =  
       language.language_id  
       JOIN film_category ON film.film_id =  
       film_category.film_id  
       JOIN category ON film_category.  
       category_id = category.category_id;
```

```
dvdrental=# \i solution.sql  
CREATE VIEW  
dvdrental=# SELECT * FROM lab_4_film_view;
```

film_name	language_name	category_name
Academy Dinosaur	English	Documentary
Ace Goldfinger	English	Horror
Adaptation Holes	English	Documentary
Affair Prejudice	English	Horror
African Egg	English	Family
Agent Truman	English	Foreign
Airplane Sierra	English	Comedy
Airport Pollock	English	Horror
Alabama Devil	English	Horror
Aladdin Calendar	English	Sports
Alamo Videotape	English	Foreign
Alaska Phantom	English	Music
Ali Forever	English	Horror
Alice Fantasia	English	Classics
Alien Center	English	Foreign
Alley Evolution	English	Foreign
Alone Trip	English	Music
Alter Victory	English	Animation
Amadeus Holy	English	Action
Amelie Hellfighters	English	Music
American Circus	English	Action
Amistad Midsummer	English	New
Anaconda Confessions	English	Animation
Analyze Hoosiers	English	Horror
Angels Life	English	New
:		

Wind Phantom	English	Games
Window Side	English	Travel
Wisdom Worker	English	Comedy
Witches Panic	English	Drama
Wizard Coldblooded	English	Music
Wolves Desire	English	Travel
Women Dorado	English	Action
Won Dares	English	Music
Wonderful Drop	English	Foreign
Wonderland Christmas	English	Sci-Fi
Wonka Sea	English	Animation
Words Hunter	English	Music
Worker Tarzan	English	Travel
Working Microcosmos	English	Travel
World Leathernecks	English	Horror
Worst Banger	English	Action
Wrath Mile	English	Documentary
Wrong Behavior	English	Children
Wyoming Storm	English	New
Yentl Idaho	English	Horror
Young Language	English	Documentary
Youth Kick	English	Music
Zhivago Core	English	Horror
Zoolander Fiction	English	Children
Zorro Ark	English	Comedy
(1000 rows)		

(END)

Q6. Create a view with the list of all distinct languages an actor has acted. The view should include: Actor's first name, last name, and the languages he worked in. (it would be better if the actor has an only one-row entry with the language column stores all distinct language acted by him/her in the same cell)

```
dbms-lab > labwork > assignment_4 > solution.sql > ...
52  /
    *****
    *****/
53  /* Q6: Create a view with the list of all
    distinct languages an actor has acted. The
    view should include: Actor ' s first name,
    last name and the languages he worked.(it
    would be better if actor has only one row
    entry with the language colum stores all
    distinct language acted by him / her in the
    same cell) */
    ► Run SQL
54  CREATE VIEW lab_4_actor_language_view AS
55  SELECT first_name,
56         last_name,
57         STRING_AGG(
58             DISTINCT language.name,
59             ', '
60         ORDER BY language.name ASC
61         ) AS language_name
62  FROM actor
63       JOIN film_actor ON actor.actor_id =
        film_actor.actor_id
64       JOIN film ON film_actor.film_id = film.
        film_id
65       JOIN language ON film.language_id =
        language.language_id
66  GROUP BY first_name,
67         last_name;
```

```
dvdrental=# \i solution.sql
CREATE VIEW
dvdrental=# SELECT * FROM lab_4_actor_language_view;
```


first_name	last_name	language_name
Adam	Grant	English
Adam	Hopper	English
Al	Garland	English
Alan	Dreyfuss	English
Albert	Johansson	English
Albert	Nolte	English
Alec	Wayne	English
Angela	Hudson	English
Angela	Witherspoon	English
Angelina	Astaire	English
Anne	Cronyn	English
Audrey	Bailey	English
Audrey	Olivier	English
Bela	Walken	English
Ben	Harris	English
Ben	Willis	English
Bette	Nicholson	English
Bob	Fawcett	English
Burt	Dukakis	English
Burt	Posey	English
Burt	Temple	English
Cameron	Streep	English
Cameron	Wray	English
Cameron	Zellweger	English
Carmen	Hunt	English
:		

Sean		Guinness		English
Sean		Williams		English
Sidney		Crowe		English
Sissy		Sobieski		English
Spencer		Depp		English
Spencer		Peck		English
Susan		Davis		English
Sylvester		Dern		English
Thora		Temple		English
Tim		Hackman		English
Tom		Mckellen		English
Tom		Miranda		English
Uma		Wood		English
Val		Bolger		English
Vivien		Basinger		English
Vivien		Bergen		English
Walter		Torn		English
Warren		Jackman		English
Warren		Nolte		English
Whoopi		Hurt		English
Will		Wilson		English
William		Hackman		English
Woody		Hoffman		English
Woody		Jolie		English
Zero		Cage		English

(199 rows)

(END)