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/*****
* NAME: Samuel Sovi
* CLASS: CPSC 321
* DATE: 12/9/22
* HOMEWORK: HW 8
* DESCRIPTION: PRACTING MORE COMPLICATED QUERIES
*****/

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-- TODO: Implement the queries for HW8 below. Include comments as
--       appropriate.

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-- Question 1:

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```

CREATE VIEW customer_rental as
    SELECT customer_id, first_name, last_name, rental_date, film_id, title
    FROM cpsc321.customer JOIN cpsc321.rental USING (customer_id) JOIN cpsc321.i
nventory USING(inventory_id) JOIN cpsc321.film USING (film_id)
    ORDER BY last_name ASC, first_name ASC, rental_date ASC;

```

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-- Testing:
-- SELECT *
-- FROM customer_rental
-- LIMIT 10;

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-- Question 2:

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```

WITH film_update AS(
    (SELECT film_id, last_update, 'actor' as type FROM film_actor)
    UNION ALL
    (SELECT film_id, last_update, 'category' as type FROM film_category)
    UNION ALL
    (SELECT film_id, last_update, 'inventory' as type FROM inventory)
)
SELECT film_id, title, fu.last_update, type
FROM film_update fu JOIN film f USING(film_id) JOIN film_category USING(film_id)
    JOIN category c USING(category_id)
WHERE c.name = 'Action'
ORDER BY title ASC, fu.last_update ASC;

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-- Question 3:

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SELECT film_id, title, rating, length,
    CASE
        WHEN length > 80 THEN 'feature'
        WHEN length > 50 THEN 'featurette'
        ELSE 'short'
    END AS type
FROM film;

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-- Question 4:

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SELECT film_id, title, rating, length,
    DENSE_RANK() OVER (PARTITION BY RATING ORDER BY length ASC) rank
FROM film;

```

-- Question 5:

```
SELECT film_id, title, rating, length
FROM (SELECT film_id, title, rating, length, DENSE_RANK() OVER (PARTITION BY RAT
ING ORDER BY length ASC) AS rank
      FROM film) AS ranking
WHERE rank <= 5;
```

SAMUEL SOVI
OUTPUTS FOR HW 8:

Question 1:

```
MariaDB [ssovi_DB]> source hw8.sql;
```

customer_id	first_name	last_name	rental_date	film_id	title
505	RAFAEL	ABNEY	2005-05-26 01:34:28	757	SAGEBRUSH CLUELESS
505	RAFAEL	ABNEY	2005-05-28 19:14:09	687	POCUS PULP
505	RAFAEL	ABNEY	2005-06-16 20:17:20	624	NIGHTMARE CHILL
505	RAFAEL	ABNEY	2005-06-17 03:36:02	515	LEGALLY SECRETARY
505	RAFAEL	ABNEY	2005-06-19 18:04:18	902	TRADING PINOCCHIO
505	RAFAEL	ABNEY	2005-06-20 19:41:28	172	CONEHEADS SMOOCHY
505	RAFAEL	ABNEY	2005-07-07 00:26:43	245	DOUBLE WRATH
505	RAFAEL	ABNEY	2005-07-08 02:22:45	179	CONQUERER NUTS
505	RAFAEL	ABNEY	2005-07-11 00:16:35	369	GOODFELLAS SALUTE
505	RAFAEL	ABNEY	2005-07-11 17:23:33	956	WANDA CHAMBER

10 rows in set (0.000 sec)

Question 2:

```
MariaDB [cpssc321]> source hw8.sql;
```

film_id	title	last_update	type
19	AMADEUS HOLY	2006-02-15 05:05:03	actor
19	AMADEUS HOLY	2006-02-15 05:07:09	category
19	AMADEUS HOLY	2006-02-15 05:09:17	inventory
21	AMERICAN CIRCUS	2006-02-15 05:05:03	actor
21	AMERICAN CIRCUS	2006-02-15 05:07:09	category
21	AMERICAN CIRCUS	2006-02-15 05:09:17	inventory
29	ANTITRUST TOMATOES	2006-02-15 05:05:03	actor
29	ANTITRUST TOMATOES	2006-02-15 05:07:09	category
29	ANTITRUST TOMATOES	2006-02-15 05:09:17	inventory
38	ARK RIDGEMONT	2006-02-15 05:05:03	actor

10 rows in set (0.000 sec)

Question 3:

```
MariaDB [cpssc321]> source hw8.sql;
```

film_id	title	rating	length	type
1	ACADEMY DINOSAUR	PG	86	feature
2	ACE GOLDFINGER	G	48	short
3	ADAPTATION HOLES	NC-17	50	short
4	AFFAIR PREJUDICE	G	117	feature
5	AFRICAN EGG	G	130	feature
6	AGENT TRUMAN	PG	169	feature
7	AIRPLANE SIERRA	PG-13	62	featurette
8	AIRPORT POLLOCK	R	54	featurette
9	ALABAMA DEVIL	PG-13	114	feature
10	ALADDIN CALENDAR	NC-17	63	featurette

10 rows in set (0.000 sec)

Question 4:

```
MariaDB [cpssc321]> source hw8.sql;
```

film_id	title	rating	length	rank
237	DIVORCE SHINING	G	47	1
247	DOWNHILL ENOUGH	G	47	1
575	MIDSUMMER GROUNDHOG	G	48	2
2	ACE GOLDFINGER	G	48	2
430	HOOK CHARIOTS	G	49	3
83	BLUES INSTINCT	G	50	4
292	EXCITEMENT EVE	G	51	5
794	SIDE ARK	G	52	6
542	LUST LOCK	G	52	6
402	HARPER DYING	G	52	6

10 rows in set (0.000 sec)

Question 5:

```
MariaDB [cpssc321]> source hw8.sql;
```

film_id	title	rating	length
237	DIVORCE SHINING	G	47
247	DOWNHILL ENOUGH	G	47
575	MIDSUMMER GROUNDHOG	G	48
2	ACE GOLDFINGER	G	48
430	HOOK CHARIOTS	G	49
83	BLUES INSTINCT	G	50
292	EXCITEMENT EVE	G	51
469	IRON MOON	PG	46
784	SHANGHAI TYCOON	PG	47
869	SUSPECTS QUILLS	PG	47
670	PELICAN COMFORTS	PG	48
753	RUSH GOODFELLAS	PG	48
410	HEAVEN FREEDOM	PG	48
443	HURRICANE AFFAIR	PG	49
524	LION UNCUT	PG	50
607	MUPPET MILE	PG	50
679	PILOT HOOSIERS	PG	50
730	RIDGEMONT SUBMARINE	PG-13	46
504	KWAI HOMEWARD	PG-13	46
505	LABYRINTH LEAGUE	PG-13	46

```
20 rows in set (0.002 sec)
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