### FILM TABLE SUMMARY

average\_rental\_duration maximum\_rental\_duration minimum\_rental\_duration

Numerical 4.985 7 3

Non-numerical mode\_rating mode\_language\_id mode\_release\_year

PG-13 1 2006

SELECT MAX (rental duration) AS maximum rental duration,

MIN (rental duration) AS minimum rental duration,

AVG (rental duration) AS average rental duration,

MAX (rental rate) AS maximum rental rate,

MIN (rental rate) AS minimum rental rate,

AVG (rental\_rate) AS average\_rental\_rate,

MAX (length) AS maximum\_length,

MIN (length) AS minimum\_length,

AVG (length) AS average\_length,

MAX (replacement\_cost) AS maximum\_replacement\_cost,

MIN (replacement cost) AS minimum replacement cost,

AVG (replacement\_cost) AS average\_replacement\_cost,

MODE () WITHIN GROUP (ORDER BY rating) AS mode rating,

MODE () WITHIN GROUP (ORDER BY language id) AS mode language id,

MODE () WITHIN GROUP (ORDER BY release year) AS mode release year,

MODE () WITHIN GROUP (ORDER BY last\_update) AS mode\_last\_update

FROM film

# average\_rental\_rate maximum\_rental\_rate minimum\_rental\_rate average\_length 2.98 4.99 0.99 115.272

mode\_last\_update 50:59.0

```
SELECT MAX (rental_duration) AS maximum_rental_durat
1
    MIN (rental_duration) AS minimum_rental_duration,
    AVG (rental_duration) AS average_rental_duration,
    MAX (rental_rate) AS maximum_rental_rate,
    MIN (rental_rate) AS minimum_rental_rate,
    AVG (rental_rate) AS average_rental_rate,
 7
    MAX (length) AS maximum_length,
    MIN (length) AS minimum_length,
    AVG (length) AS average_length,
9
10
    MAX (replacement_cost) AS maximum_replacement_cost,
    MIN (replacement_cost) AS minimum_replacement_cost,
11
12
    AVG (replacement_cost) AS average_replacement_cost,
    MODE () WITHIN GROUP (ORDER BY rating) AS mode_ratin
13
14
    MODE () WITHIN GROUP (ORDER BY language_id) AS mode_
    MODE () WITHIN GROUP (ORDER BY release_year) AS mode.
15
16
    MODE () WITHIN GROUP (ORDER BY last_update) AS mode_
    FROM film
17
18
         Data Output
                     Messages
                               Notifications
              maximum_rental_duration
                                   minimum_rental_duration
                                                        ave
              smallint
                                   smallint
                                                        nun
         1
                                                     3
```

# maximum\_length minimum\_length average\_replacement\_cost maximum\_replacement\_cost 185 46 19.984 29.99

ion,

g,
language\_id,
\_release\_year,
last\_update



minimum\_replacement\_cost mode\_rating mode\_language\_id mode\_release\_year 9.99 PG-13 1 2006

mode\_last\_update 50:59.0

## **CUSTOMER TABLE SUMMARY**

mode\_first\_namemode\_last\_namemode\_store\_idmode\_last\_updatemode\_create\_dateJamieAbney149:45.72/14/2006

#### **SELECT**

MODE () WITHIN GROUP (ORDER BY first\_name) AS mode\_first\_name,

MODE () WITHIN GROUP (ORDER BY last name) AS mode last name,

MODE () WITHIN GROUP (ORDER BY store\_id) AS mode\_address\_id,

MODE () WITHIN GROUP (ORDER BY last\_update) AS mode\_last\_update,

MODE () WITHIN GROUP (ORDER BY create date) AS mode create date,

MODE () WITHIN GROUP (ORDER BY active) AS mode\_active

FROM customer

1

```
1 SELECT
2
   MODE () WITHIN GROUP (ORDER BY first_name) AS mode_first_name,
   MODE () WITHIN GROUP (ORDER BY last_name) AS mode_last_name,
   MODE () WITHIN GROUP (ORDER BY store_id) AS mode_address_id,
5
   MODE () WITHIN GROUP (ORDER BY last_update) AS mode_last_update,
6
   MODE () WITHIN GROUP (ORDER BY create_date) AS mode_create_date,
7
   MODE () WITHIN GROUP (ORDER BY active) AS mode_active
8
   FROM customer
         Data Output
                     Messages Notifications
                                  <u>+</u>
                                       ~
              mode_first_name
                                               mode_address_id
                              mode_last_name
                                                                mode_last_update
                                                                                        mode_create_
                                                               timestamp without time zone
                              character varying
                                               smallint
              character varying
                                                                                        date
        1
                                                                2013-05-26 14:49:45.738
                                                                                         2006-02-14
              Jamie
                               Abney
```



SELECT title AS movie\_title, name AS genre, SUM(amount) AS total\_revenue FROM film A

INNER JOIN film\_category B ON A.film\_id = B.film\_id

INNER JOIN category C ON B.category\_id = C.category\_id

INNER JOIN inventory D ON A.film\_id = D.film\_id

INNER JOIN rental E ON D.inventory\_id = E.inventory\_id

INNER JOIN payment F ON E.rental\_id = F.rental\_id

GROUP BY name, title

ORDER BY SUM(amount) DESC

LIMIT 10

Title	Genre	Total revenue
Telegraph Voyage	Music	215.75
Zorro Ark	Comedy	199.72
Wife Turn	Documentary	198.73
Innocent Usual	Foreign	191.74
Hustler Party	Comedy	190.78
Saturday Lambs	Sports	190.74
Titans Jerk	Sci-Fi	186.73
Harry Idaho	Drama	177.73
Torque Bound	Drama	169.76
Dogma Family	Animation	168.72

#### Query Query History

- SELECT title AS movie\_title, name AS genre, SUM(amount) AS total\_revenue
  FROM film A
  INNER JOIN film\_category B ON A.film\_id = B.film\_id
- 4 INNER JOIN category C ON B.category\_id = C.category\_id
- 5 INNER JOIN inventory D ON A.film\_id = D.film\_id
  6 INNER JOIN rental E ON D.inventory\_id = E.inventory\_id
- 7 INNER JOIN payment F ON E.rental\_id = F.rental\_id
- 8 **GROUP BY name**, title
- 9 ORDER BY SUM(amount) DESC
- 10 **LIMIT 10**

Data	Data Output Messages Notifications		
=+			
	movie_title character varying (255)	genre character varying (25)	total_revenue numeric
1	Telegraph Voyage	Music	215.75
2	Zorro Ark	Comedy	199.72
3	Wife Turn	Documentary	198.73
4	Innocent Usual	Foreign	191.74
5	Hustler Party	Comedy	190.78



SELECT title AS movie\_title, name AS genre, SUM(amount) AS total\_revenue FROM film A

INNER JOIN film\_category B ON A.film\_id = B.film\_id

INNER JOIN category C ON B.category\_id = C.category\_id

INNER JOIN inventory D ON A.film\_id = D.film\_id

INNER JOIN rental E ON D.inventory\_id = E.inventory\_id

INNER JOIN payment F ON E.rental\_id = F.rental\_id

GROUP BY name, title

ORDER BY SUM(amount)

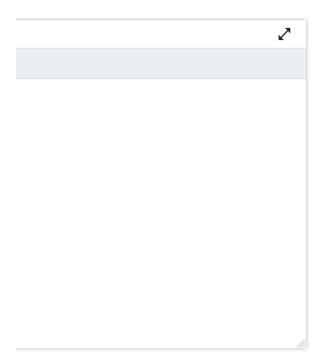
LIMIT 10

movie_title	genre	total	_revenue
Oklahoma Juma	New		5.9
Duffel Apocalyp	Documentary		5.9
Texas Watch	Horror		5.9
Freedom Cleopa	Comedy		5.9
Rebel Airport	Music		6.93
Young Language	Documentary		6.93
Cruelty Unforgiv	Classics		6.9
Treatment Jekyl	Drama		6.9
Lights Deer	Classics		7.93
Stallion Sundan	Sci-Fi		7.9

```
SELECT title AS movie_title, name AS genre, SUM(amount) AS t
    FROM film A
2
3
    INNER JOIN film_category B ON A.film_id = B.film_id
   INNER JOIN category C ON B.category_id = C.category_id
   INNER JOIN inventory D ON A.film_id = D.film_id
5
   INNER JOIN rental E ON D.inventory_id = E.inventory_id
6
   INNER JOIN payment F ON E.rental_id = F.rental_id
7
    GROUP BY name, title
    ORDER BY SUM(amount)
9
10
   LIMIT 10
```

Data Output Messages Notifications			
=+		<u>*</u>	
	movie_title character varying (255)	genre character varying (25)	total_revenue numeric
1	Oklahoma Jumanji	New	5.94
2	Duffel Apocalypse	Documentary	5.94
3	Texas Watch	Horror	5.94
4	Freedom Cleopatra	Comedy	5.95
5	Rebel Airport	Music	6.93
6	Young Language	Documentary	6.93
7	Cruelty Unforgiven	Classics	6.94
8	Treatment Jekyll	Drama	6.94
9	Lights Deer	Classics	7.93
10	Stallion Sundance	Sci-Fi	7.94

total\_revenue



SELECT name AS genre, SUM(amount) AS total\_revenue FROM film A

INNER JOIN film\_category B ON A.film\_id = B.film\_id

INNER JOIN category C ON B.category\_id = C.category\_id

INNER JOIN inventory D ON A.film\_id = D.film\_id

INNER JOIN rental E ON D.inventory\_id = E.inventory\_id

INNER JOIN payment F ON E.rental\_id = F.rental\_id

GROUP BY name

ORDER BY SUM(amount) DESC

LIMIT 10

genre	total_revenue
Sports	4892.19
Sci-Fi	4336.01
Animation	4245.31
Drama	4118.46
Comedy	4002.48
New	3966.38
Action	3951.84
Foreign	3934.47
Games	3922.18
Family	3782.26

Quer	y Qu
1	SELEC
2	FROM
3	INNEF
4	INNEF
5	INNEF
6	INNEF
7	INNEF
8	GROUF
9	ORDEF
10	LIMIT

#### ıery History

```
CT name AS genre, SUM(amount) AS total_revenue
film A

R JOIN film_category B ON A.film_id = B.film_id

R JOIN category C ON B.category_id = C.category_id

R JOIN inventory D ON A.film_id = D.film_id

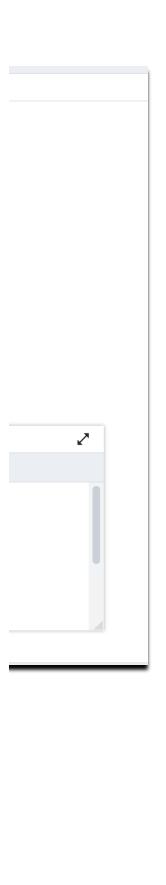
R JOIN rental E ON D.inventory_id = E.inventory_id

R JOIN payment F ON E.rental_id = F.rental_id

P BY name

R BY SUM(amount) DESC
T 10
```

Data	Output Messages I	Notifications
=+		• ~
	genre character varying (25)	total_revenue numeric
1	Sports	4892.19
2	Sci-Fi	4336.01
3	Animation	4245.31
4	Drama	4118.46
5	Comedy	4002.48



SELECT rating, SUM(amount) AS total\_revenue
FROM film A
INNER JOIN film\_category B ON A.film\_id = B.film\_id
INNER JOIN category C ON B.category\_id = C.category\_id
INNER JOIN inventory D ON A.film\_id = D.film\_id
INNER JOIN rental E ON D.inventory\_id = E.inventory\_id
INNER JOIN payment F ON E.rental\_id = F.rental\_id
GROUP BY rating
ORDER BY SUM(amount) DESC
LIMIT 10

rating	total_revenue
PG-13	13855.56
NC-17	12634.92
PG	12236.65
R	12073.03
G	10511.88

1	SELECT r
2	FROM fil
3	INNER JO
4	INNER JO
5	INNER JO
6	INNER JO
7	INNER JO
8	GROUP BY
9	ORDER BY
10	LIMIT 10



Total rower 5 of

```
rating, SUM(amount) AS total_revenue
.m A

IN film_category B ON A.film_id = B.film_id

IN category C ON B.category_id = C.category_id

IN inventory D ON A.film_id = D.film_id

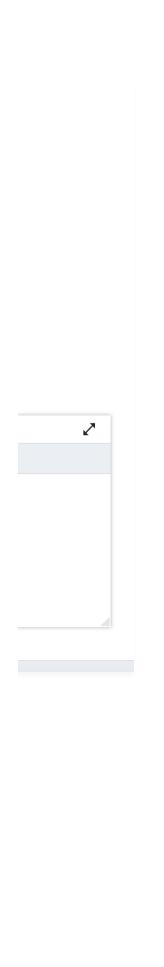
IN rental E ON D.inventory_id = E.inventory_id

IN payment F ON E.rental_id = F.rental_id

' rating
' SUM(amount) DESC
)
```

#### a Output Messages **Notifications** total\_revenue rating mpaa\_rating numeric PG-13 13855.56 NC-17 12634.92 PG 12236.65 12073.03 G 10511.88

5 Outry complete 00:00:00 270



SELECT name AS genre, AVG(rental\_duration) AS average\_rental\_duration FROM film A

INNER JOIN film\_category B ON A.film\_id = B.film\_id

INNER JOIN category C ON B.category\_id = C.category\_id

INNER JOIN inventory D ON A.film\_id = D.film\_id

INNER JOIN rental E ON D.inventory\_id = E.inventory\_id

INNER JOIN payment F ON E.rental\_id = F.rental\_id

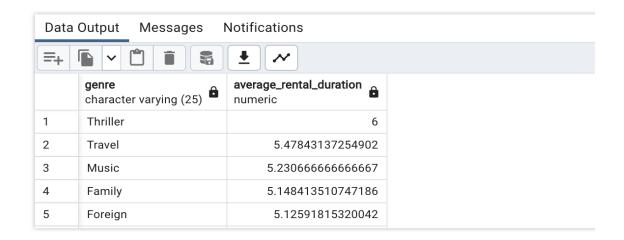
GROUP BY name

ORDER BY AVG(rental\_duration) DESC

genre	average_rental_duration
Thriller	6
Travel	5.478431373
Music	5.230666667
Family	5.148413511
Foreign	5.125918153
Drama	5.068205666
Games	5.003393665
Children	5.00232288
Action	4.932872655
Classics	4.925581395

LIMIT 10

```
SELECT name AS genre, AVG(rental_duration) AS average_rental_duration
1
2
   FROM film A
  INNER JOIN film_category B ON A.film_id = B.film_id
3
   INNER JOIN category C ON B.category_id = C.category_id
4
5
   INNER JOIN inventory D ON A.film_id = D.film_id
   INNER JOIN rental E ON D.inventory_id = E.inventory_id
6
7
   INNER JOIN payment F ON E.rental_id = F.rental_id
8
   GROUP BY name
   ORDER BY AVG(rental_duration) DESC
9
10 LIMIT 10
```





SELECT D.country, COUNT(customer\_id) AS count\_of\_customers FROM customer A
INNER JOIN address B ON A.address\_id = B.address\_id
INNER JOIN city C ON B.city\_id = C.city\_id
INNER JOIN country D ON C.country\_id = D.country\_id
GROUP BY country
ORDER BY COUNT(customer\_id) DESC
LIMIT 10

country	count_of	_customers	
India			60
China			53
United States			36
Japan			31
Mexico			30
Brazil			28
<b>Russian Federation</b>			28
Philippines			20
Turkey			15
Indonesia			14



#### listory

```
.country, COUNT(customer_id) AS count_of_customers
tomer A
IN address B ON A.address_id = B.address_id
IN city C ON B.city_id = C.city_id
IN country D ON C.country_id = D.country_id
country
COUNT(customer_id) DESC
```



6.10

1 - 7 0-146

SELECT D.country, city, COUNT(customer\_id) AS count\_of\_customers FROM customer A

INNER JOIN address B ON A.address\_id = B.address\_id

INNER JOIN city C ON B.city\_id = C.city\_id

INNER JOIN country D ON C.country\_id = D.country\_id

GROUP BY country, city

ORDER BY COUNT(customer\_id) DESC

LIMIT 10

country	city	count_of_customers	
United Kingdom	London		2
United States	Aurora		2
Spain	Santiago de (		1
Japan	Iwaki		1
China	Shanwei		1
Morocco	Nador		1
China	Tianjin		1
Angola	Benguela		1
South Africa	Rustenburg		1
South Africa	Newcastle		1



```
I.country, city, COUNT(customer_id) AS count_of_customers
:tomer A
IIN address B ON A.address_id = B.address_id
IIN city C ON B.city_id = C.city_id
IIN country D ON C.country_id = D.country_id
' country, city
' COUNT(customer_id) DESC
```



SELECT A.customer\_id, A.first\_name, A.last\_name, C.city, D.country, SUM(E.amount) / FROM customer A

INNER JOIN address B ON A.address\_id = B.address\_id

INNER JOIN city C ON B.city\_id = C.city\_id

INNER JOIN country D ON C.country\_id = D.country\_id

INNER JOIN payment E ON A.customer\_id = E.customer\_id

WHERE city IN ('London', 'Aurora', 'Santiago de Compostela', 'Iwaki', 'Shanwei', 'Nador

GROUP BY A.customer\_id, A.first\_name, A.last\_name, C.city, D.country

ORDER BY total\_amount\_spent DESC

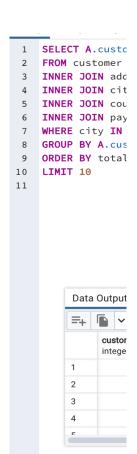
LIMIT 10

customer_id	first_name	last_name	city	country
512	Cecil	Vines	London	ited Kingdom
424	Kyle	Spurlock	Shanwei	China
240	Marlene	Welch	Iwaki	Japan
40	Amanda	Carter	Nador	Morocco
407	Dale	Ratcliff	Rustenburg	South Africa
537	Clinton	Buford	Aurora	United States
528	Claude	Herzog	Benguela	Angola
432	Edwin	Burk	Newcastle	South Africa
249	Dora	Medina	Tianjin	China
549	Nelson	Christenson	Santiago de Compostela	Spain

```
AS total_amount_spent
```

', 'Tianjin', 'Benguela', 'Rustenburg', 'Newcastle')

_amount_	_spent
	115.74
	109.71
	106.77
	105.74
	104.74
	98.76
	93.8
	93.8
	88.81
	62.84
	_amount_



```
Dmer_id, A.first_name, A.last_name, C.city, D.country, SUM(E.amount) AS total_amount_spent
A

dress B ON A.address_id = B.address_id
ty C ON B.city_id = C.city_id
untry D ON C.country_id = D.country_id
//ment E ON A.customer_id = E.customer_id
('London', 'Aurora', 'Santiago de Compostela', 'Iwaki', 'Shanwei', 'Nador', 'Tianjin', 'Benguela', 'Rustomer_id, A.first_name, A.last_name, C.city, D.country
l_amount_spent DESC
```

t Messa	ages Notifications			2
mer_id er	first_name character varying (45)	last_name character varying (45)	city character varying (50)	country character varying (50)
512	Cecil	Vines	London	United Kingdom
424	Kyle	Spurlock	Shanwei	China
240	Marlene	Welch	Iwaki	Japan
40	Amanda	Carter	Nador	Morocco
407	Dala	Dotaliff	Dustanhura	Courth Africa

ustenburg', 'Newc