

Solutions

Solution 1:

```
SELECT DISTINCT replacement_cost
FROM film
ORDER BY 1
```

Solution 2:

```
SELECT
CASE
WHEN replacement_cost BETWEEN 9.99 AND 19.99
THEN 'low'
WHEN replacement_cost BETWEEN 20 AND 24.99
THEN 'medium'
ELSE 'high'
END as cost_range,
COUNT(*)
FROM film
GROUP BY cost_range
```

Solution 3:

```
SELECT
title,
name,
length
FROM film f
LEFT JOIN film_category fc
ON f.film_id=fc.film_id
LEFT JOIN category c
ON c.category_id=fc.category_id
WHERE name = 'Sports' OR name = 'Drama'
ORDER BY length DESC
```

Solution 4:

```
SELECT
name,
COUNT(title)
FROM film f
INNER JOIN film_category fc
ON f.film_id=fc.film_id
INNER JOIN category c
```

```
ON c.category_id=fc.category_id
GROUP BY name
ORDER BY 2 DESC
```

Solution 5:

```
SELECT
first_name,
last_name,
COUNT(*)
FROM actor a
LEFT JOIN film_actor fa
ON fa.actor_id=a.actor_id
LEFT JOIN film f
ON fa.film_id=f.film_id
GROUP BY first_name, last_name
ORDER BY COUNT(*) DESC
```

Solution 6:

```
SELECT * FROM address a
LEFT JOIN customer c
ON c.address_id = a.address_id
WHERE c.first_name is null
```

Solution 7:

```
SELECT
city,
SUM(amount)
FROM payment p
LEFT JOIN customer c
ON p.customer_id=c.customer_id
LEFT JOIN address a
ON a.address_id=c.address_id
LEFT JOIN city ci
ON ci.city_id=a.city_id
GROUP BY city
ORDER BY city DESC
```

Solution 8:

```
SELECT
country ||', ' ||city,
SUM(amount)
FROM payment p
LEFT JOIN customer c
```

```

ON p.customer_id=c.customer_id
LEFT JOIN address a
ON a.address_id=c.address_id
LEFT JOIN city ci
ON ci.city_id=a.city_id
LEFT JOIN country co
ON co.country_id=ci.country_id
GROUP BY country ||', ' ||city
ORDER BY 2 ASC

```

Solution 9:

```

SELECT
staff_id,
ROUND(AVG(total),2) as avg_amount
FROM (
SELECT SUM(amount) as total,customer_id,staff_id
FROM payment
GROUP BY customer_id, staff_id) a
GROUP BY staff_id

```

Solution 10:

```

SELECT
AVG(total)
FROM
    (SELECT
        SUM(amount) as total,
        DATE(payment_date),
        EXTRACT(dow from payment_date) as weekday
    FROM payment
    WHERE EXTRACT(dow from payment_date)=0
    GROUP BY DATE(payment_date),weekday) daily

```

Solution 11:

```

SELECT
title,
length
FROM film f1
WHERE length > (SELECT AVG(length) FROM film f2
                WHERE f1.replacement_cost=f2.replacement_cost)
ORDER BY length ASC

```

Solution 12:

```

SELECT

```

```

district,
ROUND(AVG(total),2) avg_customer_spent
FROM
(SELECT
c.customer_id,
district,
SUM(amount) total
FROM payment p
INNER JOIN customer c
ON c.customer_id=p.customer_id
INNER JOIN address a
ON c.address_id=a.address_id
GROUP BY district, c.customer_id) sub
GROUP BY district
ORDER BY 2 DESC

```

Solution 13:

```

SELECT
title,
amount,
name,
payment_id,
(SELECT SUM(amount) FROM payment p
LEFT JOIN rental r
ON r.rental_id=p.rental_id
LEFT JOIN inventory i
ON i.inventory_id=r.inventory_id
LEFT JOIN film f
ON f.film_id=i.film_id
LEFT JOIN film_category fc
ON fc.film_id=f.film_id
LEFT JOIN category c1
ON c1.category_id=fc.category_id
WHERE c1.name=c.name)
FROM payment p
LEFT JOIN rental r
ON r.rental_id=p.rental_id
LEFT JOIN inventory i
ON i.inventory_id=r.inventory_id
LEFT JOIN film f
ON f.film_id=i.film_id
LEFT JOIN film_category fc
ON fc.film_id=f.film_id
LEFT JOIN category c
ON c.category_id=fc.category_id
ORDER BY name

```

Solution 14 (Bonus question):

```
SELECT
title,
name,
SUM(amount) as total
FROM payment p
LEFT JOIN rental r
ON r.rental_id=p.rental_id
LEFT JOIN inventory i
ON i.inventory_id=r.inventory_id
LEFT JOIN film f
ON f.film_id=i.film_id
LEFT JOIN film_category fc
ON fc.film_id=f.film_id
LEFT JOIN category c
ON c.category_id=fc.category_id
GROUP BY name,title
HAVING SUM(amount) = (SELECT MAX(total)
                      FROM
                        (SELECT
                          title,
                          name,
                          SUM(amount) as total
                        FROM payment p
                        LEFT JOIN rental r
                        ON r.rental_id=p.rental_id
                        LEFT JOIN inventory i
                        ON i.inventory_id=r.inventory_id
                        LEFT JOIN film f
                        ON f.film_id=i.film_id
                        LEFT JOIN film_category fc
                        ON fc.film_id=f.film_id
                        LEFT JOIN category c1
                        ON c1.category_id=fc.category_id
                        GROUP BY name,title) sub
                      WHERE c.name=sub.name)
```