

## SQL THEORIES

1. What is the difference between an Inner Join, a Left Join, and a Full Join?
2. What is View used for?
3. What is the difference between a primary key and foreign key?

## SQL QUERIES (Refer to the Sakila database for these questions)

**Payment Table**

payment_id	customer_id	staff_id	rental_id	amount	payment_date	last_update
1	1	1	76	2.99	2005-05-25 11:30:37	2006-02-15 22:12:30
2	1	1	573	0.99	2005-05-28 10:35:23	2006-02-15 22:12:30
3	1	1	1185	5.99	2005-06-15 00:54:12	2006-02-15 22:12:30
4	1	2	1422	0.99	2005-06-15 18:02:53	2006-02-15 22:12:30
5	1	2	1476	9.99	2005-06-15 21:08:46	2006-02-15 22:12:30
6	1	1	1725	4.99	2005-06-16 15:18:57	2006-02-15 22:12:30

**Customer Table**

customer_id	store_id	first_name	last_name	email	address_id	active	create_date	last_update
1	1	MARY	SMITH	MARY.SMITH@sakilacustomer.org	5	1	2006-02-14 22:04:36	2006-02-15 04:57:20
2	1	PATRICIA	JOHNSON	PATRICIA.JOHNSON@sakilacustomer.org	6	1	2006-02-14 22:04:36	2006-02-15 04:57:20
3	1	LINDA	WILLIAMS	LINDA.WILLIAMS@sakilacustomer.org	7	1	2006-02-14 22:04:36	2006-02-15 04:57:20
4	2	BARBARA	JONES	BARBARA.JONES@sakilacustomer.org	8	1	2006-02-14 22:04:36	2006-02-15 04:57:20
5	1	ELIZABETH	BROWN	ELIZABETH.BROWN@sakilacustomer.org	9	1	2006-02-14 22:04:36	2006-02-15 04:57:20
6	2	JENNIFER	DAVIS	JENNIFER.DAVIS@sakilacustomer.org	10	1	2006-02-14 22:04:36	2006-02-15 04:57:20

1. What is the total amount paid by each customer? Be sure to include the customer's full name in your resulting query.
2. How many films have a rating over that of the average rating?
3. What are the names of the top 10 customers who spent the most money on films? How much did each customer spend?