SELECT film\_id,title

FROM film

WHERE film\_id IN

(

SELECT film\_id

FROM rental AS r

INNER JOIN inventory AS i ON i.inventory\_id = r.inventory\_id

WHERE return\_date BETWEEN '2005-05-29' AND '2005-05-30'

)

Retrieved film id and title for films which have return date between 2005-05-29 and 2005-05-30

SELECT a.customer\_id, a.first\_name, a.last\_name, b.customer\_id, b.first\_name, b.last\_name

FROM customer AS a

INNER JOIN customer AS b

ON a.first\_name = b.last\_name

Retrieved customer information of customers that have the first name matching to the last name of another customer

SELECT name

FROM cd.facilities

WHERE name ILIKE '%TENNIS%'

Retrieved facility names with “Tennis” in the name

SELECT title, rental\_rate

FROM film

WHERE rental\_rate>(

SELECT AVG(rental\_rate)

FROM film

)

Retrieved title and rental rates for films which have rental rate greater than the average rental rate

SELECT firstname || ' ' || surname AS fullname, starttime

FROM cd.members AS mem

INNER JOIN cd.bookings AS book ON mem.memid = book.memid

WHERE firstname || ' ' || surname = 'David Farrell'

Retrieved list of start times for members named “David Farrell”

SELECT name,starttime

FROM cd.bookings AS book

INNER JOIN cd.facilities AS fac ON fac.facid = book.facid

WHERE extract(year from(starttime))='2012' AND

extract(month from(starttime))='09' AND

extract(day from (starttime))='21' AND

name ILIKE 'tennis%'

ORDER BY starttime

Retrieved name and starttime of Tennis facilities with starttime on 09-21-2012

SELECT customer\_id, amount

FROM payment

ORDER BY amount DESC

LIMIT 10

Retrieved Customer IDs and Amounts that had the Top 10 highest amounts

SELECT film\_id,title

FROM film

WHERE film\_id <= 5

ORDER BY film\_id

Retrieved Movie Titles of film IDs 1 through 5

SELECT COUNT(\*)

FROM payment

WHERE amount > 5

Retrieved number of payments greater than $5

SELECT COUNT(\*)

FROM actor

WHERE first\_name ILIKE('P%')

Retrieved number of actors having first name that starts with P

SELECT COUNT(DISTINCT(district))

FROM address

Retrieved number of unique districts

SELECT DISTINCT district

FROM address

Retrieved names of unique districts

SELECT COUNT(DISTINCT title)

FROM film

WHERE rating = 'R' AND

replacement\_cost BETWEEN 5 AND 15

Retrieved count of films which have rating of “R” and replacement cost between 5 an 15

SELECT COUNT(\*)

FROM film

WHERE title ILIKE '%truman%'

Retrieved count of films that have word “Truman” somewhere in title

SELECT staff\_id,COUNT(payment\_id) as payments

FROM payment

GROUP BY staff\_id

Retrieved amount of payments each staff member had

SELECT staff\_id, round(sum(amount),0) as total

FROM payment

GROUP BY staff\_id

Retrieved total sum of payments for each staff member

SELECT rating,round(AVG(replacement\_cost),2) as AverageReplacementCost

FROM film

GROUP BY rating

Retrieved average replacement cost by rating

SELECT customer\_id, SUM(amount) as totalSpent

FROM payment

GROUP BY customer\_id

ORDER BY totalSpent DESC

LIMIT 5

Retrieved Ids of Top 5 Highest spending customers

SELECT customer\_id, COUNT(payment\_id) AS payments

FROM payment

GROUP BY customer\_id

HAVING COUNT(payment\_id) >40

Retrieved Ids of customers that have made more than 40 payments

SELECT rating, round(AVG(rental\_duration),0) as AvgRentalDuration

FROM film

GROUP BY rating

HAVING AVG(rental\_duration) > 5

Retrieved ratings that have average rental duration as more than 5 days

SELECT customer\_id, SUM(amount) as totalSpent

FROM payment

WHERE staff\_id = 2

GROUP BY customer\_id

HAVING SUM(amount)>110

Retrieved customers who spent more than $110 with staff member #2

SELECT COUNT(\*)

FROM film

WHERE title ILIKE 'J%'

Retrieved num of films that start with “J”

SELECT first\_name, last\_name

FROM customer

WHERE first\_name LIKE 'E%' AND

address\_id < 500

ORDER BY customer\_id DESC

LIMIT 1

Retrieved customer who has the highest customer id whose name starts with “E” and has address id less than 500

SELECT facid,name,membercost,monthlymaintenance

FROM cd.facilities

WHERE (membercost>0 AND membercost<(monthlymaintenance/50))

Retrieved facility id, facility name, member cost, maintenance for facilities with member cost more than 0 and less than 1/50th of monthly maintenance

CREATE TABLE customer(

customer\_id serial PRIMARY KEY,

firstname VARCHAR(50) NOT NULL,

lastname VARCHAR(50) NOT NULL,

email VARCHAR(50) UNIQUE,

signup\_date timestamp NOT NULL,

num\_min INTEGER NOT NULL

)

Created customer table

CREATE TABLE teachers(

student\_id serial PRIMARY KEY,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

homeroom\_number CHAR(3),

phone CHAR(10) NOT NULL UNIQUE,

email VARCHAR(255) UNIQUE,

graduation\_year DATE

)

Created teachers table

INSERT INTO teachers(student\_id,first\_name,last\_name,homeroom\_number,phone,graduation\_year)

VALUES(1,'Mark','Watney',100,7775559818,'06-01-2035')

Inserted Mark Watney’s record