**Part 1: SQL Out-Join tables and Subselect**

#1. Who are the actors of the movie “Flash Wars”?

SELECT actor.first\_name, actor.last\_name

FROM moviedb.actor, moviedb.film, moviedb.film\_actor

WHERE actor.actor\_id = film\_actor.actor\_id

AND film.film\_id = film\_actor.film\_id

AND film.title = 'Flash Wars';

#2. What are the title and length for films rated PG and longer than average length?

SELECT film.title, film.length

FROM moviedb.film

WHERE film.rating='PG'

AND film.length > (SELECT avg(film.length) from moviedb.film);

#3. How many different last names are there in Actor table?

SELECT COUNT(\*)

FROM (SELECT DISTINCT last\_name FROM moviedb.actor) AS tmp1;

#4. What's the most expensive (in terms of rental rate) film by Penelope Guiness? And what is the rental rate?

SELECT film.title, film.rental\_rate

FROM moviedb.actor, moviedb.film, moviedb.film\_actor

WHERE actor.actor\_id = film\_actor.actor\_id

AND film.film\_id = film\_actor.film\_id

AND actor.first\_name=' Penelope'

AND actor.last\_name=' Guiness'

AND film.rental\_rate=

(SELECT max(film.rental\_rate)

FROM moviedb.actor, moviedb.film, moviedb.film\_actor

WHERE actor.actor\_id = film\_actor.actor\_id

AND film.film\_id = film\_actor.film\_id

AND actor.first\_name=' Penelope'

AND actor.last\_name=' Guiness')

**Part 2: SQL In-Putting Data into the Data Base**

**1). Create the Company table using SQL.**

CREATE TABLE wsDB.Company (

CompanyID INT(10) NOT NULL,

CompanyName VARCHAR(45) NULL,

Street VARCHAR(45) NULL,

City VARCHAR(45) NULL,

State VARCHAR(2) NULL,

Zip VARCHAR(10) NULL,

PRIMARY KEY (CompanyID));

2). Now we think 45 characters for City is not necessary. Let’s change it to 15 characters.

ALTER TABLE wsDB.Company

CHANGE COLUMN City

City VARCHAR(15);

3). Let’s add one company to the table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CompanyID** | **CompanyName** | **Street** | **City** | **State** | **Zip** |
| 107 | AT&T | 112 EAST St. | New York | NY | 10232 |

INSERT INTO wsDB.Company

(CompanyID, CompanyName, Street, City, State, Zip)

VALUES (107,'AT&T','112 EAST St.','New York','NY','10232');

4). Now let’s change the Zip code of AT&T to 10232-1111:

UPDATE wsDB.Company

SET Zip='10232-1111'

WHERE CompanyID=107;

5). You forgot to add the description column (that can go up to 100 character) in **ContactEmployee** table. Please add this column.

ALTER TABLE wsDB.CotactEmployee

ADD COLUMN Description VARCHAR(100) NULL;