Practical 02 – Example 02
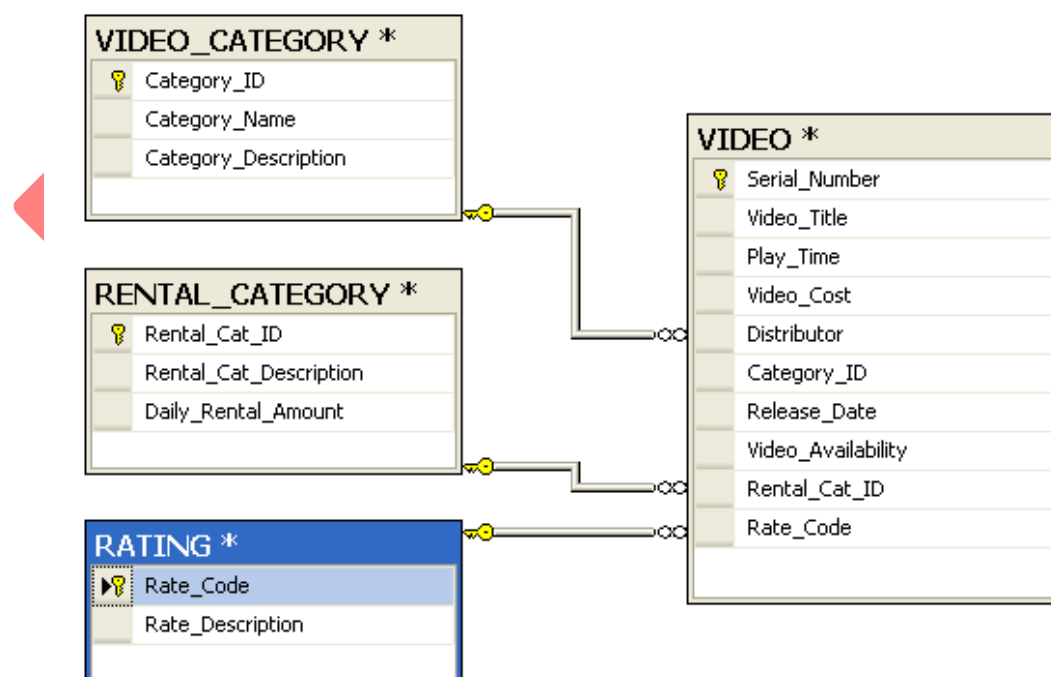
Data Manipulation (12 marks)

Universiteit van Pretoria
University of Pretoria

Important Notes:
1. Bring the following to the practical session:
    a. The Practical Textbook and/or the lecture notes for the exercise class in which the exercise was explained

2. SQL scripts are what is marked
    a. Scripts which run and perform what they are supposed to do get full marks
    b. Scripts which do not run will be marked on their own merit

3. Please refer to Lecture Week 02 (L2) for examples of relational algebra. Also refer to Hotek Chapter 10, as well as the class notes (03SQLCh10.pdf) on ClickUP for examples on generic structures as well as specific code.

DATABASE CONTEXT:

In this example, you will create four of the tables for the video store called VideoShop. Name the database *VideoShop*. The tables to be created are VIDEO_CATEGORY, RENTAL_CATEGORY, RATING and VIDEO. Shown below, is part of the VideoShop ERD that shows the four entities.

Questions:

1.	Create the Database CREATE THE DATABASE *VideoShop*	(2 marks)

2.	Create the Tables CREATE THE accompanying TABLES as shown in the ERD taking special note of the datatypes as specified below:	(4 marks)

VIDEO_CATEGORY

FIELD NAME	DATA TYPE
Category_ID (PK)	int
Category _Name	Varchar(50)
Category_Description	Varchar(100)

RENTAL_CATEGORY

FIELD NAME	DATA TYPE
Rental_Cat_ID (PK)	int
Rental_Cat_Description	Varchar(100)
Daily_Rental_Amount	int

RATING

FIELD NAME	DATA TYPE
Rate_Code (PK)	Varchar(50)
Rate_Description	Varchar(100)

VIDEO

FIELD NAME	DATA TYPE
Serial_number (PK)	int
Category_ID (FK)	int
Rental_Cat_ID (FK)	int
Rate_Code (FK)	Varchar(50)
Video_Title	Varchar(50)

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3.	**Insert data into the Tables (4 marks)** Using INSERT INTO statements, enter the following test data:	**(4 marks)**

3.1.	For the VIDEO_CATEGORY table save the query as follows: INSERT_VIDEO_CATEGORY1.sql	**(1 marks)**

VIDEO_CATEGORY : Table

	Category_ID	Category_Name	Category_Description
+	1	Action	Action packed movies
+	2	Thriller	Spine chilling and full of suspense

3.2.	For the RENTAL_CATEGORY save the query as follows: INSERT_ RENTAL_CATEGORY.sql	**(1 marks)**

RENTAL_CATEGORY : Table

	Rental_Cat_ID	Rental_Cat_Description	Daily_Rental_Amount
+	001	Old	R 10.00
+	002	New	R 20.00

3.3.	For the RATING save the query as below: INSERT_ RATING.sql	**(1 marks)**

RATING : Table

	Rate_Code	Rate_Description
+	A	suitable for all ages
+	PG10	parental guidance for children under 10

3.4.	For the VIDEO save the query as follows: INSERT_VIDEO1.sql	**(1 marks)**

4.	**Delete data from the table (1 mark)** Write a DELETE query to delete one of the records you inserted into the VIDEO table. Save the query as: DELETE_VIDEO.sql	**(1 marks)**

5.	**Update data in the table (1 mark)** Write an UPDATE query to update one of the records you inserted into the VIDEO table. Save the query as UPDATE_VIDEO.sql	**(1 marks)**

TOTAL : 12 MARKS