**Assignment 2**

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Part 1

**Part I. Table Creation**

Question 1. Construct tables using the provided relational schemas. **Incorporate all the specified integrity constraints like domain constraints and referential integrity constraints during table creation. S**ubmit the SQL statements you employed for this creation.

Solution: The various SQL queries used to create the following tables are:

* For Price Table

CREATE TABLE PRICE (

PRICE\_CODE NUMBER(2,0) PRIMARY KEY,

PRICE\_DESCRIPTION VARCHAR2(20) NOT NULL,

PRICE\_RENTFEE NUMBER(5,2) CHECK (PRICE\_RENTFEE >= 0),

PRICE\_DAILYLATEFEE NUMBER(5,2) CHECK (PRICE\_DAILYLATEFEE >= 0)

);

* For Movie Table

CREATE TABLE MOVIE (

MOVIE\_NUM NUMBER(8,0) PRIMARY KEY,

MOVIE\_TITLE VARCHAR2(75) NOT NULL,

MOVIE\_YEAR NUMBER(4,0) CHECK (MOVIE\_YEAR > 1900),

MOVIE\_COST NUMBER(5,2),

MOVIE\_GENRE VARCHAR2(50),

PRICE\_CODE NUMBER(2,0),

CONSTRAINT fk\_price\_code FOREIGN KEY (PRICE\_CODE) REFERENCES PRICE(PRICE\_CODE)

);

* For Video table

CREATE TABLE VIDEO (

VID\_NUM NUMBER(8,0) PRIMARY KEY,

VID\_INDATE DATE,

MOVIE\_NUM NUMBER(8,0),

CONSTRAINT fk\_movie\_num FOREIGN KEY (MOVIE\_NUM) REFERENCES MOVIE(MOVIE\_NUM)

);

* For Membership Table

CREATE TABLE MEMBERSHIP (

MEM\_NUM NUMBER(8,0) PRIMARY KEY,

MEM\_FNAME VARCHAR2(30) NOT NULL,

MEM\_LNAME VARCHAR2(30) NOT NULL,

MEM\_STREET VARCHAR2(120),

MEM\_CITY VARCHAR2(50),

MEM\_STATE CHAR(2),

MEM\_ZIP CHAR(5),

MEM\_BALANCE NUMBER(10,2)

);

* For Rental Table

CREATE TABLE RENTAL (

RENT\_NUM NUMBER(8,0) PRIMARY KEY,

RENT\_DATE DATE DEFAULT SYSDATE,

MEM\_NUM NUMBER(8,0),

CONSTRAINT fk\_mem\_num FOREIGN KEY (MEM\_NUM) REFERENCES MEMBERSHIP(MEM\_NUM)

);

* For Detail Rental Table

CREATE TABLE DETAILRENTAL (

RENT\_NUM NUMBER(8,0),

VID\_NUM NUMBER(8,0),

DETAIL\_FEE NUMBER(5,2),

DETAIL\_DUEDATE DATE,

DETAIL\_RETURNDATE DATE,

DETAIL\_DAILYLATEFEE NUMBER(5,2),

PRIMARY KEY (RENT\_NUM, VID\_NUM),

CONSTRAINT fk1\_rent\_num FOREIGN KEY (RENT\_NUM) REFERENCES RENTAL(RENT\_NUM),

CONSTRAINT fk2\_vid\_num FOREIGN KEY (VID\_NUM) REFERENCES VIDEO(VID\_NUM)

);