```
/* 1 */
create table EMPLOYEE (
EMP_NUM varchar(3),
EMP_LNAME varchar(15),
EMP_FNAME varchar(15),
EMP_INITIAL varchar(15),
EMP_HIREDATE datetime,
JOB_CODE varchar(3),
primary key (EMP_NUM),
foreign key (JOB_CODE) references JOB(JOB_CODE)
);
select * from constructco.employee;
/* 2 */
INSERT INTO EMPLOYEE VALUES('101', 'News', 'John', 'G', '2000-11-8', '502', '4');
INSERT INTO EMPLOYEE VALUES('102', 'Senior', 'David', 'H', '1989-7-12', '501', '15');
INSERT INTO EMPLOYEE VALUES('103', 'Arbough', 'June', 'E', '1996-12-1', '500', '8');
INSERT INTO EMPLOYEE VALUES('104', 'Ramoras', 'Anne', 'K', '1987-11-15', '501', '17');
INSERT INTO EMPLOYEE VALUES('105', 'Johnson', 'Alice', 'K', '1993-2-1', '502', '12');
INSERT INTO EMPLOYEE VALUES('106', 'Smithfield', William', NULL 12004 6
INSERT INTO EMPLOYEE VALUES('106', 'Smithfield', 'William', NULL, '2004-6-
22', '500', '0');
INSERT INTO EMPLOYEE VALUES('107', 'Alonzo', 'Maria', 'D', '1993-10-10', '500', '11');
INSERT INTO EMPLOYEE VALUES('108', 'Washington', 'Ralph', 'B', '1991-8-22', '501', '13');
INSERT INTO EMPLOYEE VALUES('109', 'Smith', 'Larry', 'W', '1997-7-18', '501', '7');
/* 3 */
INSERT INTO EMPLOYEE VALUES('110','Olenko','Gerald','A','1995-12-11','505','9');
INSERT INTO EMPLOYEE VALUES('111', 'Wabash', 'Geoff', 'B', '1991-4-4', '506', '14');
INSERT INTO EMPLOYEE VALUES('112', 'Smithson', 'Darlene', 'M', '1994-10-
23', '507', '10');
INSERT INTO EMPLOYEE VALUES('113', 'Joenbrood', 'Delbert', 'K', '1996-11-
15', '508', '8');
INSERT INTO EMPLOYEE VALUES('114', 'Jones', 'Annelise', NULL, '1993-8-20', '508', '11');
INSERT INTO EMPLOYEE VALUES('115', 'Bawangi', 'Travis', 'B', '1992-1-25', '501', '13');
INSERT INTO EMPLOYEE VALUES('116', 'Pratt', 'Gerald', 'L', '1997-3-5', '510', '8');
INSERT INTO EMPLOYEE VALUES('117', 'Williamson', 'Angie', 'H', '1996-6-19', '509', 'SUNCERT INTO EMPLOYEE VALUES('118', 'Frommer', 'James', 'J', '2005-1-4', '510', '0');
select * from constructco.employee;
/* 4 */
 select EMP_1
commit;
/* 5 */
update EMP_1
set JOB\_CODE = '501'
where EMP_NUM = '107';
/* 6 */
delete from EMP_1
where EMP_FNAME = 'William'
and EMP_LNAME = 'Smithfield'
and EMP HIREDATE = '2004-6-22'
and JOB\_CODE = '500';
/* 7 */
SELECT * INTO EMP_2 FROM EMP_1;
/* 8 */
```

```
alter TABLE emp_2
modify column EMP_PCT Decimal (4,2);
alter TABLE emp_2
modify column PROJ_NUM character (3);
/* 9 */
update EMP_2
set EMP_PCT = '3.85'
where EMP_NUM = '103';
/* 10 */
update EMP_2
set EMP_PCT = '5.00'
where EMP_NUM in ('101' '105' '107');
/* 11 */
Update EMP_2
set EMP_PCT = '10.00'
where EMP_PCT is null;
/* 12 */
update EMP_2
set EMP_PCT= '.15'
where LNAME = 'Maria' and FNAME= 'Alonzo';
/* 13 */
update EMP_2
set PROJ_NUM= '18'
where JOB\_CODE = '500';
/* 14 */
update EMP_2
set PROJ_NUM = '25'
where JOB\_CODE = '502';
/* 15 */
update emp 2
set PROJ_NUM = '14'
where EMP_HIREDATE < '1994-1-1' and JOB_CODE >= '501';
/* 16 */
create table CH08_CUSTOMER (
CUST_NUM varchar(4),
CUST_LNAME varchar(30),
CUST_FNAME varchar(30),
CUST_BALANCE decimal(6,2),
primary key (CUST_NUM));
/* 17 */
create table INVOICE (
INV_NUM varchar(4),
CUST_NUM varchar(30),
INV_DATE DATETIME,
primary key (INV_NUM));
/* 18 */
insert into CH08_CUSTOMER values (1000, 'Smith', 'Jeanne', 1050.11);
```

```
insert into CH08_CUSTOMER values (1001, 'Ortega', 'Juan', 840.92);
/* 19 */
insert into INVOICE values (8000, 1000, 2016-3-23, 235.89);
insert into INVOICE values (8001,1001,2016-3-23,312.82);
insert into INVOICE values (8002,1001,2016-3-30,528.10);
insert into INVOICE values (8003, 1000, 2016-4-12, 194.70);
insert into INVOICE values (8004, 1000, 2016-4-23, 619.44);
/* 20*/
create sequence CUST_NUM_SEQ
Start with 2000
Nocache;
/* 21 */
create sequence INV_NUM_SEQ
Start with 9000
Nocache;
/* 22 */
Insert into CUST_MYSQL(CUST_LNAME, CUST_FNAME, CUST_BALANCE)
value ('Powers', 'Ruth', 500);
/* 23 */
alter table CUST_MYSQL
add CUST_DOB date;
/* 24 */
update CUST_MYSQL
set CUST_DOB = '1989-03-15'
where CUST_NUM= 1000;
/* 25 */
update CUST_MYSQL
set CUST DOB = '1988-12-22'
where CUST_NUM= 1001;
/* 26 */
Create Trigger TRG_UPDATECUSTBALANCE
after Insert on INVOICE
for each row
Update CUST_MYSQL
      set CUST_BALANCE = CUST_BALANCE + NEW.INV_AMOUNT
      where CUST_NUM = NEW.CUST_NUM;
Select * from CUST_MYSQL;
Insert into INVOICE values (8005, 1001, '2018-04-27');
Select * from CUST_MYSQL;
/* 27 */
create or replace procedure prc_cust_add
(W_CN IN NUMBER, W_CLN IN VARCHAR, W_CFN IN VARCHAR, W_CBAL IN NUMBER)
AS
BEGIN
INSERT INTO CH08_CUSTOMER
VALUES (W_CN, W_CLN, W_CFN, W_CBAL)
```

```
prc_cust_add(1002, 'Rauthor', 'Peter', 0.00)
END;
SELECT * FROM CUSTOMER;
/* 28 */
create or replace procedure prc_invoice_add
(W_CN IN NUMBER, W_CLN IN VARCHAR, W_CFN IN VARCHAR, W_CBAL IN NUMBER)
AS
BEGIN
INSERT INTO INVOICE
VALUES (W_CN, W_CLN, W_CFN, W_CBAL)
prc_invoice_add (8006, 1000, '2018-04-30', '301.72')
END;
SELECT * FROM INVOICE;
/* 29 */
create or replace TIGGER trg_updatecustbalance2
after delete on INVOICE
for each row
declare
begin
update CUSTOMER
set CUST_BALANCE = CUST_BALANCE -: OLD.AMOUNT
where CUST_NUM = :OLD.CUST_NUM
END;
/* 30 */
create or replace PROCEDURE Proc_Name
as
Begin
IF IN_NUM is not null
Delete From INVOICE
Where INV_NUM = IN_NUM
END if,
END;
EXEC PRC_INV_DELETE (8005)
EXEC PRC_INV_DELETE (8006)
Select * from INVOICE;
/* KCT */
/* KCT sample tables */
/* Type of SQL : MySQL */
/* Create the KCT_Costumetype table. */
/* The KCT_Costumetype table must be created before the KCT_Costume table, */
/* since the Costumetype field in the KCT_Costume table refers to the
KCT_Costumetype table's typeID field. */
CREATE TABLE KCT_Costumetype (
 TypeId
                 SMALLINT
                             NOT NULL,
 Description
                 VARCHAR(35) NOT NULL,
 Photo
                 VARCHAR(30),
 DailyRentalRate NUMERIC(8,2) NOT NULL,
                 NUMERIC(8,2),
 depositRate
 replacementCost NUMERIC(8,2),
PRIMARY KEY (typeId));
/* Insert data into the KCT_Costumetype table. */
```

```
INSERT INTO KCT_Costumetype (TypeId, description, photo, dailyrentalrate,
depositrate,replacementcost)
VALUES (1, "Clown", "clown.jpg", 20.00, 30.00, 50.00);
INSERT INTO KCT_Costumetype (TypeId, description, photo, dailyrentalrate,
depositrate, replacementcost)
VALUES (2, "Ballerina", "ballerina.jpg", 20.00, 20.00, 50.00);
INSERT INTO KCT_Costumetype (TypeId, description, photo, dailyrentalrate,
depositrate, replacementcost)
VALUES (3, "Gorilla", "gorilla.jpeg", 30.00, 23, 50);
INSERT INTO KCT_Costumetype (TypeId, description, dailyrentalrate)
VALUES (4, "Misc", 50.00);
INSERT INTO KCT_Costumetype (TypeId, description, photo, dailyrentalrate,
depositrate.replacementcost)
VALUES (5, "star wars: Darth Vader", "darth vader.jpg", 40.00, 30.00, 70.00);
INSERT INTO KCT_Costumetype (TypeId, description, photo, dailyrentalrate,
depositrate, replacementcost)
VALUES (6, "star wars: luke", "luke.jpg", 40.00, 30.00, 70.00);
INSERT INTO KCT_Costumetype (TypeId, description, photo, dailyrentalrate,
depositrate, replacementcost)
VALUES (7, "star wars: leia", "leia.jpg", 40.00, 30.00, 70.00);
/* Create the KCT_Costume table */
/* We set the available field to "true" as a default. */
/* The Costumetype field in the KCT_Costume table refers to the KCT_Costumetype
table's typeID field. */
CREATE TABLE KCT_Costume (
 CostumeID SMALLINT NOT NULL,
 size VARCHAR(10) NOT NULL,
 available BOOLEAN
                       NOT NULL DEFAULT TRUE,
 datePurchased
                    DATE,
 Costumetype SMALLINT NOT NULL,
PRIMARY KEY (CostumeID),
 FOREIGN KEY (Costumetype) REFERENCES KCT_Costumetype(typeID));
INSERT INTO KCT_Costume (CostumeID, size, available, datePurchased, Costumetype)
VALUES (1, "large", 1, '2009-02-04', 2);
INSERT INTO KCT_Costume (CostumeID, size, available, datePurchased, Costumetype)
VALUES (2, "medium", 1, '2009-03-04', 1);
INSERT INTO KCT_Costume (CostumeID, size, available, datePurchased, Costumetype)
VALUES (3, "large", 1, '2009-04-04', 3);
INSERT INTO KCT_Costume (CostumeID, size, available, datePurchased, Costumetype)
VALUES (4, "large", 1, '2009-05-04', 2);
INSERT INTO KCT_Costume (CostumeID, size, available, datePurchased, Costumetype)
VALUES (5, "small", 0, '2009-06-04', 2);
INSERT INTO KCT_Costume (CostumeID, size, available, datePurchased, Costumetype)
VALUES (6, "small", 1, '2009-07-04', 2);
```

```
INSERT INTO KCT_Costume (CostumeID, size, available, datePurchased, Costumetype)
VALUES (7, "small", 0, '2009-07-14', 5);
INSERT INTO KCT_Costume (CostumeID, size, available, datePurchased, Costumetype)
VALUES (8, "medium", 1, '2009-08-14', 7);
INSERT INTO KCT_Costume (CostumeID, size, available, datePurchased, Costumetype)
VALUES (9, "large", 0, '2009-08-14', 6);
INSERT INTO KCT_Costume (CostumeID, size, available, datePurchased, Costumetype)
VALUES (10, "medium", 1, '2009-08-14', 5);
INSERT INTO KCT_Costume (CostumeID, size, available, datePurchased, Costumetype)
VALUES (11, "medium", 1, '2009-08-14', 6);
CREATE TABLE KCT_Customer (
 CustomerID SMALLINT NOT NULL,
 Firstname VARCHAR(10) NOT NULL,
 lastname VARCHAR(10) NOT NULL,
 Street VARCHAR(15) NOT NULL,
 City VARCHAR(10) NOT NULL,
 state VARCHAR(15),
 zip int,
 phone int,
 PRIMARY KEY (CustomerID));
      INSERT INTO KCT_Customer (CustomerID, Firstname, lastname, Street, City,
state, zip, phone)
      VALUES (5, 'Khalid', 'Al Rasbi', '25', 'NE', '68845', '4023321082');
      INSERT INTO KCT_Customer (CustomerID, Firstname, lastname, Street, City,
state, zip, phone)
      VALUES (7, 'Hakim', 'Bezri', '16', 'NE', '68845', '3025541676');
      INSERT INTO KCT Customer (CustomerID, Firstname, lastname, Street, City,
state, zip, phone)
      VALUES (9, 'Ali', 'Al ghaithi', '22', 'NE', '68845', '4022215647');
 CREATE TABLE KCT_Rental (
 RentalID SMALLINT NOT NULL,
 Rentaldate date,
 Numberofdays int,
 Rentalamount decimal,
 Deposit decimal,
 Tax decimal,
 Totalamount decimal,
 CustomerID SMALLINT,
 ReturnDate date,
 Amountreturned decimal,
 PRIMARY KEY (RentalID),
 FOREIGN KEY (CustomerID) REFERENCES KCT_Customer(CustomerID));
 INSERT INTO KCT_Rental (RentalID, Rentaldate, Numberofdays, Rentalamount, Deposit,
Tax, Totalamount, CustomerID, ReturnDate, Amountreturned )
VALUES ('1', '2020-11-5', '10', '4', '0.2', '25', '4', '2020-11-25', '6');
 INSERT INTO KCT_Rental (RentalID, Rentaldate, Numberofdays, Rentalamount, Deposit,
Tax, Totalamount, CustomerID, ReturnDate, Amountreturned )
```

```
VALUES ('1','2020-09-1', '33', '3', '0.2', '23', '1', '2020-12-25', '5');
 INSERT INTO KCT_Rental (RentalID, Rentaldate, Numberofdays, Rentalamount, Deposit,
Tax, Totalamount, CustomerID, ReturnDate, Amountreturned )
 VALUES ('1','2020-11-1', '20', '1', '0.2', '12', '7', '2020-11-20', '8');
 CREATE TABLE KCT lineitem (
 RentalID SMALLINT NOT NULL,
 CostumeID SMALLINT NOT NULL,
 Rate DECIMAL(10,0) DEFAULT NULL,
 Deposit DECIMAL(10,0) DEFAULT NULL,
 PRIMARY KEY (RentalID, CostumeID),
 CONSTRAINT lineRentalFK FOREIGN KEY (RentalID) REFERENCES KCT_Rental (RentalID),
 CONSTRAINT linecostumeFK FOREIGN KEY (CostumeID) REFERENCES KCT_Costume
(costumeID));
INSERT INTO KCT_Lineitem(RentalID, CostumeID, Rate , Deposit)
VALUES ('1', '1', '22', '40');
INSERT INTO KCT_Lineitem(RentalID, CostumeID, Rate , Deposit)
VALUES ('2', '2', '19', '25');
INSERT INTO KCT_Lineitem(RentalID, CostumeID, Rate, Deposit)
VALUES ('3','2', '30', '30');
SELECT (FirtName, LastName, PhoneNumber)
from KCT_Customer;
SELECT (FirtName, LastName, PhoneNumber)
from KCT Customer
where TotalAmount>1 and ReturnDate is not null;
SELECT (FirtName, LastName, PhoneNumber)
from KCT_Customer LEFT JOIN KCT_Renatl on TotalAmount >1 and ReturnDate is not
null;
SELECT (CostumeID, Size, Description)
FROM KCT_Costume;
SELECT (CostumeID, Size, Description)
FROM KCT_Costume
WHERE Description = 'star wars';
SELECT (CostumeID, Size, Description)
FROM KCT_Costume
WHERE Rentalamount >1;
SELECT (CostumeID, Size, Description)
FROM KCT_Costume
WHERE Numberofdays<30;
CREATE VIEW KCT CustomerAddress
 AS SELECT KCT Customer.LastName AS LastName, KCT Customer.FirstName AS FirstName,
KCT_Customer.Street AS Street, KCT_Customer.City AS City, KCT_Customer.state as
State, KCT_Customer.zip AS ZipCode
FROM KCT_Customer;
CREATE VIEW KCT_LateRental
AS SELECT KCT_Customer.LastName AS LastName, KCT_Customer.FirstName AS FirstName,
```

```
KCT_Customer.phone AS PhoneNumber,
KCT_Rental.Rentaldate AS RentalDate, KCT_Rental.Rentalamount AS RentalAmount,
KCT_Rental.Numberofdays AS NumberOfDays,
(current_date() - KCT_Rental.Rentaldate - KCT_Rental.NumberOfDays) AS
NumberOfDaysLate
FROM KCT_Rental, KCT_Customer
where current_date() > (Rentaldate + Numberofdays) and ReturnDate is not null;
```