PRACTICAL NO 1:

```
CREATE TABLE Customer (
       CustomerKey VARCHAR2(6) NOT NULL,
       CustomerName VARCHAR2(10) NOT NULL,
       CustomerCode VARCHAR2(5) NOT NULL,
       Address VARCHAR2(10) NOT NULL,
       ZipCode NUMBER(6) NOT NULL,
       State VARCHAR2(10) NOT NULL,
       RentalPlanType VARCHAR2(10) NOT NULL,
       CONSTRAINT CUSTOMER_PK PRIMARY KEY (CustomerKey)
);
CREATE TABLE Promotion (
       PromotionKey VARCHAR2(6) NOT NULL,
       PromotionCode VARCHAR2(6) NOT NULL,
       PromotionType VARCHAR2(10) NOT NULL,
       DiscountRate NUMBER(5) NOT NULL,
       CONSTRAINT PROMOTION_PK PRIMARY KEY (PromotionKey)
);
CREATE TABLE Store (
       StoreKey VARCHAR2(5) NOT NULL,
       StoreName VARCHAR2(10) NOT NULL,
       StoreCode VARCHAR2(5) NOT NULL,
       Zipcode NUMBER(6) NOT NULL,
       Manager VARCHAR2(10) NOT NULL,
       CONSTRAINT STORE_PK PRIMARY KEY (StoreKey)
);
CREATE TABLE Time (
       TimeKey VARCHAR2(5) NOT NULL,
       Date1 VARCHAR2(10) NOT NULL,
       DayOfMonth VARCHAR2(10) NOT NULL,
       WeekEndFlag NUMBER(5) NOT NULL,
       Month VARCHAR2(10) NOT NULL,
       Quarter VARCHAR2(5) NOT NULL,
       Year NUMBER(5) NOT NULL,
       CONSTRAINT TIME_PK PRIMARY KEY (TimeKey)
);
CREATE TABLE RentalItem (
       ItemKey VARCHAR2(10) NOT NULL,
       ItemNo NUMBER(4) NOT NULL,
       Rating NUMBER(5) NOT NULL,
       NewReleaseFlag NUMBER(5) NOT NULL,
       Genre VARCHAR2(10) NOT NULL,
       Classification VARCHAR2(10) NOT NULL,
```

```
subClassification VARCHAR2(10) NOT NULL,
       Director VARCHAR2(10) NOT NULL.
       LeadMale VARCHAR2(10) NOT NULL,
       LeadFemale VARCHAR2(10) NOT NULL,
       CONSTRAINT RIT_PK PRIMARY KEY (ItemKey)
);
CREATE TABLE RentalFacts (
       FactKey VARCHAR2(5) NOT NULL,
       CustomerKey VARCHAR2(6) NOT NULL,
       PromotionKey VARCHAR2(6) NOT NULL,
       RentalFee NUMBER(6) NOT NULL,
       LateCharge NUMBER(6) NOT NULL,
       StoreKey VARCHAR2(5) NOT NULL,
       TimeKey VARCHAR2(5) NOT NULL,
       ItemKey VARCHAR2(10) NOT NULL,
       CONSTRAINT RFT PK PRIMARY KEY (FactKey)
);
ALTER TABLE RentalFacts ADD CONSTRAINT CUSTOMER RENTALFACTS FK
FOREIGN KEY (CustomerKey)
REFERENCES Customer (CustomerKey)
NOT DEFERRABLE;
ALTER TABLE RentalFacts ADD CONSTRAINT PROMOTION RENTALFACTS FK
FOREIGN KEY (PromotionKey)
REFERENCES Promotion (PromotionKey)
NOT DEFERRABLE;
ALTER TABLE RentalFacts ADD CONSTRAINT STORE RENTALFACTS FK
FOREIGN KEY (StoreKey)
REFERENCES Store (StoreKey)
NOT DEFERRABLE;
ALTER TABLE RentalFacts ADD CONSTRAINT TIME_RENTALFACTS_FK
FOREIGN KEY (TimeKey)
REFERENCES Time (TimeKey)
NOT DEFERRABLE:
ALTER TABLE RentalFacts ADD CONSTRAINT RENTALITEM RENTALFACTS FK
FOREIGN KEY (ItemKey)
REFERENCES RentalItem (ItemKey)
NOT DEFERRABLE;
SOL> desc promotion;
Name
                      Null? Type
PROMOTIONKEY
                            NOT NULL VARCHAR2(6)
PROMOTIONCODE
                            NOT NULL VARCHAR2(6)
PROMOTIONTYPE
                            NOT NULL VARCHAR2(10)
DISCOUNTRATE
                            NOT NULL NUMBER(5)
```

INSERT INTO PROMOTION VALUES('P101','P1','BANNERS',5); INSERT INTO PROMOTION VALUES('P102','21','ONLINE',5);

SQL> desc customer;

Name Null? Type CUSTOMERKEY NOT NULL VARCHAR2(6) NOT NULL VARCHAR2(10) CUSTOMERNAME CUSTOMERCODE NOT NULL VARCHAR2(5) **ADDRESS** NOT NULL VARCHAR2(10) **STATE** NOT NULL VARCHAR2(12) ZIP NOT NULL NUMBER(6) RENTALPLANTYPE NOT NULL VARCHAR2(10)

INSERT INTO CUSTOMER

VALUES('C101', 'MAHIMA', 'C1', 'SADAR', 'MAHARASHTRA', 444444, '1YEAR');

INSERT INTO CUSTOMER

VALUES('C102', 'SNEHA', 'C2', 'RAJ NAGAR', 'MAHARASHTRA', 111111, '8MONTHS');

SOL> desc store;

Name Null? Type

STOREKEY NOT NULL VARCHAR2(5)
STORENAME NOT NULL VARCHAR2(10)
STORECODE NOT NULL VARCHAR2(5)
ZIPCODE NOT NULL NUMBER(6)
MANAGER NOT NULL VARCHAR2(10)

INSERT INTO STORE VALUES('S101', 'ELECTRONIC', 'S1', 221144, 'JOHN'); INSERT INTO STORE VALUES('S102', 'COMPUTER', 'S2', 442277, 'JACK');

SQL> desc rentalitem;

Name

ITEMKEY NOT NULL VARCHAR2(10)
ITEMNO NOT NULL NUMBER(4)
RATING NOT NULL NUMBER(5)
NEWRELEASEFLAG NOT NULL NUMBER(5)
GENRE NOT NULL VARCHAR2(10)
CLASSIFICATION NOT NULL VARCHAR2(10)
SUBCLASSIFICATION NOT NULL VARCHAR2(10)

Null? Type

DIRECTOR NOT NULL VARCHAR2(10)
LEADMALE NOT NULL VARCHAR2(10)
LEADFEMALE NOT NULL VARCHAR2(10)

PRACTICAL NO 1

INSERT INTO RENTALITEM
VALUES('I101',01,4,1,'GENRE1','FOOD','CHIPS','PETER','ANKIT','ANKTA');
INSERT INTO RENTALITEM
VALUES('I102',02,3,0,'GENRE2','CLOTHES','MEN','TOM','RAHUL','ANJALI');

SQL> DESC TIME;

Name Null? Type

TIMEKEY
DATE1
NOT NULL VARCHAR2(5)
NOT NULL VARCHAR2(10)
DAYOFMONTH
NOT NULL VARCHAR2(10)
WEEKENDFLAG
NOT NULL NUMBER(5)
MONTH
QUARTER
NOT NULL VARCHAR2(10)
NOT NULL VARCHAR2(5)
YEAR
NOT NULL NUMBER(5)

INSERT INTO TIME VALUES('T101','20-JUN-19','MONDAY',0,'JUNE','Q2',2019); INSERT INTO TIME VALUES('T102','25-JUN-19','SATURDAY',1,'JUNE','Q2',2019);

SOL> DESC RENTALFACTS:

Name Null? Type

FACTKEY NOT NULL VARCHAR2(5) CUSTOMERKEY NOT NULL VARCHAR2(6) PROMOTIONKEY NOT NULL VARCHAR2(6) RENTALFEE NOT NULL NUMBER(6) NOT NULL NUMBER(6) LATECHARGE **STOREKEY** NOT NULL VARCHAR2(5) TIMEKEY NOT NULL VARCHAR2(5) **ITEMKEY** NOT NULL VARCHAR2(10)

INSERT INTO RENTALFACTS VALUES('F101','C101','P101',2000,3000,'S101','T101','I101');

SQL> INSERT INTO RENTALFACTS VALUES('F104','C104','P104',3000,1000,'S104','T104','I104'); INSERT INTO RENTALFACTS VALUES('F104','C104','P104',3000,1000,'S104','T104','I104')

ERROR at line 1:

ORA-02291: integrity constraint (MAHIMA04.RENTALITEM_RENTALFACTS_FK) violated - parent key not found