\*\*\* EXPERIMENT NO: 01 \*\*\*

-------------------------------------------------------------------------------

Author : Pradyot Patil

Roll No : 53 [7B]

Date : 17-July-2018

-- Generated by Oracle SQL Developer Data Modeler 4.1.0.873

-- at: 2018-07-17 18:05:37 IST

-- site: Oracle Database 11g

-- type: Oracle Database 11g

//**Star Schema**

SET ECHO OFF

SET FEEDBACK ON

SPOOL ON

SPOOL G:/CS753/Expt1.TXT APPEND

/\*

CREATE

TABLE Bill

(

Bill\_Date\_Key VARCHAR2 (20) NOT NULL ,

Bill\_Date VARCHAR2 (20) ,

Bill\_Date\_Year VARCHAR2 (20)

) ;

ALTER TABLE Bill ADD CONSTRAINT Bill\_PK PRIMARY KEY ( Bill\_Date\_Key ) ;

CREATE

TABLE Customer

(

Customer\_Key VARCHAR2 (20) NOT NULL ,

Customer\_id VARCHAR2 (20) ,

Customer\_Name VARCHAR2 (20) ,

Customer\_City VARCHAR2 (20) ,

Customer\_State VARCHAR2 (20) ,

Customer\_Zip VARCHAR2 (20) ,

Subs VARCHAR2 (20)

) ;

ALTER TABLE Customer ADD CONSTRAINT Customer\_PK PRIMARY KEY ( Customer\_Key ) ;

CREATE

TABLE Rate

(

Rate\_plan\_code VARCHAR2 (20) ,

Rate\_plan\_key VARCHAR2 (20) NOT NULL ,

Rate\_plan\_des VARCHAR2 (20) ,

Rate\_plan\_type\_code VARCHAR2 (20) ,

Rate\_plan\_abbrevation VARCHAR2 (20) ,

subs VARCHAR2 (20)

) ;

ALTER TABLE Rate ADD CONSTRAINT Rate\_PK PRIMARY KEY ( Rate\_plan\_key ) ;

CREATE

TABLE Sales\_Rep

(

Sales\_Rep\_Key VARCHAR2 (20) NOT NULL ,

Sales\_Rep\_Num VARCHAR2 (20) ,

Sales\_City\_Name VARCHAR2 (20) ,

Sales\_Org\_ID VARCHAR2 (20) ,

Sales\_Channel\_ID VARCHAR2 (20)

) ;

ALTER TABLE Sales\_Rep ADD CONSTRAINT Sales\_Rep\_PK PRIMARY KEY ( Sales\_Rep\_Key )

;

CREATE

TABLE Service

(

Service\_Line\_Key VARCHAR2 (20) NOT NULL ,

Service\_Line\_Number VARCHAR2 (20) ,

Service\_Line\_ac VARCHAR2 (20) ,

Service\_Line\_acp VARCHAR2 (20) ,

Service\_Line\_prefix VARCHAR2 (20) ,

Service\_Line\_act\_date VARCHAR2 (20)

) ;

ALTER TABLE Service ADD CONSTRAINT Service\_PK PRIMARY KEY ( Service\_Line\_Key )

;

CREATE

TABLE billing

(

Bill\_Bill\_Date\_Key VARCHAR2 (20) NOT NULL ,

Rate\_Rate\_plan\_key VARCHAR2 (20) NOT NULL ,

Service\_Service\_Line\_Key VARCHAR2 (20) NOT NULL ,

Sales\_Rep\_Sales\_Rep\_Key VARCHAR2 (20) NOT NULL ,

Customer\_Customer\_Key VARCHAR2 (20) NOT NULL ,

billing\_ID NUMBER NOT NULL

) ;

ALTER TABLE billing ADD CONSTRAINT billing\_PK PRIMARY KEY ( billing\_ID ) ;

ALTER TABLE billing ADD CONSTRAINT

billing\_UN

UNIQUE ( Bill\_Bill\_Date\_Key , Rate\_Rate\_plan\_key , Service\_Service\_Line\_Key ,

Sales\_Rep\_Sales\_Rep\_Key , Customer\_Customer\_Key ) ;

ALTER TABLE billing ADD CONSTRAINT billing\_Bill\_FK FOREIGN KEY (

Bill\_Bill\_Date\_Key ) REFERENCES Bill ( Bill\_Date\_Key ) ;

ALTER TABLE billing ADD CONSTRAINT billing\_Customer\_FK FOREIGN KEY (

Customer\_Customer\_Key ) REFERENCES Customer ( Customer\_Key ) ;

ALTER TABLE billing ADD CONSTRAINT billing\_Rate\_FK FOREIGN KEY (

Rate\_Rate\_plan\_key ) REFERENCES Rate ( Rate\_plan\_key ) ;

ALTER TABLE billing ADD CONSTRAINT billing\_Sales\_Rep\_FK FOREIGN KEY (

Sales\_Rep\_Sales\_Rep\_Key ) REFERENCES Sales\_Rep ( Sales\_Rep\_Key ) ;

ALTER TABLE billing ADD CONSTRAINT billing\_Service\_FK FOREIGN KEY (

Service\_Service\_Line\_Key ) REFERENCES Service ( Service\_Line\_Key ) ;

CREATE SEQUENCE billing\_billing\_ID\_SEQ START WITH 1 NOCACHE ORDER ;

CREATE OR REPLACE TRIGGER billing\_billing\_ID\_TRG BEFORE

INSERT

ON billing FOR EACH ROW WHEN

(

NEW.billing\_ID IS NULL

)

BEGIN :NEW.billing\_ID := billing\_billing\_ID\_SEQ.NEXTVAL;

END;

/

INSERT INTO Customer VALUES('1','1','Pradyot','Nagpur','Mah','440022','hello') ;

INSERT INTO Rate VALUES('1','1','Nagpur','Mah','440022','hello') ;

INSERT INTO Service VALUES('1','1','Pradyot','Nagpur','Mah','17/07/2018') ;

INSERT INTO Sales\_Rep VALUES('1','1','Pradyot','440022','121') ;

INSERT INTO Bill VALUES('1','17/07/2018','2018') ;

\*/

INSERT INTO billing VALUES('1','1','1','1','1',1) ;

SPOOL OFF

//**SnowFlake Schema**

-- Generated by Oracle SQL Developer Data Modeler 18.2.0.179.0756

-- at: 2018-07-24 00:48:19 IST

-- site: Oracle Database 11g

-- type: Oracle Database 11g

/\*

CREATE TABLE bill (

bill\_date\_key VARCHAR2(20) NOT NULL,

bill\_date VARCHAR2(20),

bill\_date\_year VARCHAR2(20)

);

ALTER TABLE bill ADD CONSTRAINT bill\_pk PRIMARY KEY ( bill\_date\_key );

CREATE TABLE billing (

bill\_num VARCHAR2(20) NOT NULL,

bill\_bill\_date\_key VARCHAR2(20) NOT NULL,

customer\_customer\_key VARCHAR2(20) NOT NULL,

sales\_rep\_sales\_rep\_key VARCHAR2(20) NOT NULL,

service\_service\_line\_key VARCHAR2(20) NOT NULL,

rate\_rate\_plan\_key VARCHAR2(20) NOT NULL,

billing\_id NUMBER NOT NULL

);

ALTER TABLE billing ADD CONSTRAINT billing\_pk PRIMARY KEY ( billing\_id );

-- ERROR: UK name length exceeds maximum allowed length(30)

ALTER TABLE billing

ADD CONSTRAINT billing\_un UNIQUE ( bill\_bill\_date\_key,

customer\_customer\_key

,

sales\_rep\_sales\_rep\_key

,

service\_service\_line\_key

,

rate\_rate\_plan\_key

);

CREATE TABLE customer (

customer\_key VARCHAR2(20) NOT NULL,

customer\_id VARCHAR2(20),

customer\_name VARCHAR2(20),

customer\_city VARCHAR2(20),

customer\_state VARCHAR2(20),

customer\_zip VARCHAR2(20),

subs VARCHAR2(20)

);

ALTER TABLE customer ADD CONSTRAINT customer\_pk PRIMARY KEY ( customer\_key );

CREATE TABLE rate (

rate\_plan\_code VARCHAR2(20),

rate\_plan\_key VARCHAR2(20) NOT NULL,

rate\_plan\_des VARCHAR2(20),

rate\_plan\_type\_code VARCHAR2(20),

rate\_plan\_abbrevation VARCHAR2(20),

subs VARCHAR2(20)

);

ALTER TABLE rate ADD CONSTRAINT rate\_pk PRIMARY KEY ( rate\_plan\_key );

CREATE TABLE sales\_org (

sales\_org\_id VARCHAR2(20) NOT NULL,

sales\_channel\_id VARCHAR2(20)

);

ALTER TABLE sales\_org ADD CONSTRAINT sales\_org\_pk PRIMARY KEY ( sales\_org\_id );

CREATE TABLE sales\_rep (

sales\_rep\_key VARCHAR2(20) NOT NULL,

sales\_rep\_num VARCHAR2(20),

sales\_city\_name VARCHAR2(20),

sales\_org\_sales\_org\_id VARCHAR2(20) NOT NULL

);

ALTER TABLE sales\_rep ADD CONSTRAINT sales\_rep\_pk PRIMARY KEY ( sales\_rep\_key );

CREATE TABLE service (

service\_line\_key VARCHAR2(20) NOT NULL,

service\_line\_number VARCHAR2(20),

service\_line\_ac VARCHAR2(20),

service\_line\_acp VARCHAR2(20),

service\_line\_prefix VARCHAR2(20),

service\_line\_act\_date VARCHAR2(20)

);

ALTER TABLE service ADD CONSTRAINT service\_pk PRIMARY KEY ( service\_line\_key );

ALTER TABLE billing

ADD CONSTRAINT billing\_bill\_fk FOREIGN KEY ( bill\_bill\_date\_key )

REFERENCES bill ( bill\_date\_key );

ALTER TABLE billing

ADD CONSTRAINT billing\_customer\_fk FOREIGN KEY ( customer\_customer\_key )

REFERENCES customer ( customer\_key );

ALTER TABLE billing

ADD CONSTRAINT billing\_rate\_fk FOREIGN KEY ( rate\_rate\_plan\_key )

REFERENCES rate ( rate\_plan\_key );

ALTER TABLE billing

ADD CONSTRAINT billing\_sales\_rep\_fk FOREIGN KEY ( sales\_rep\_sales\_rep\_key )

REFERENCES sales\_rep ( sales\_rep\_key );

ALTER TABLE billing

ADD CONSTRAINT billing\_service\_fk FOREIGN KEY ( service\_service\_line\_key )

REFERENCES service ( service\_line\_key );

ALTER TABLE sales\_rep

ADD CONSTRAINT sales\_rep\_sales\_org\_fk FOREIGN KEY ( sales\_org\_sales\_org\_id )

REFERENCES sales\_org ( sales\_org\_id );

CREATE SEQUENCE billing\_billing\_id\_seq START WITH 1 NOCACHE ORDER;

CREATE OR REPLACE TRIGGER billing\_billing\_id\_trg BEFORE

INSERT ON billing

FOR EACH ROW

WHEN ( new.billing\_id IS NULL )

BEGIN

:new.billing\_id := billing\_billing\_id\_seq.nextval;

END;

/

INSERT INTO customer VALUES('1','1','Pradyot','Nagpur','Mah','440022','hello') ;

INSERT INTO Rate VALUES('1','1','Nagpur','Mah','440022','hello') ;

INSERT INTO Service VALUES('1','1','Pradyot','Nagpur','Mah','17/07/2018') ;

INSERT INTO sales\_org VALUES('1','1');

INSERT INTO bill VALUES('1','17/07/2018','2018') ;

INSERT INTO sales\_Rep VALUES('1','1','Pradyot','1') ;

\*/

INSERT INTO billing VALUES('1','1','1','1','1','1',1) ;