Data Definition Language (DDL) Output – Financial Newsletter Publication System

Project name: Financial Publication Company

Date: 06/09/2020

# **Output of DDL scripts**

**A screenshot of a cell phone

Description automatically generated**

**A screenshot of a social media post

Description automatically generated**

SQL> SET ECHO ON

SQL> SET SERVEROUTPUT ON;

SQL>

SQL> DROP VIEW Product\_Charge\_View;

View PRODUCT\_CHARGE\_VIEW dropped.

SQL> DROP VIEW Customer\_Subscription\_View;

View CUSTOMER\_SUBSCRIPTION\_VIEW dropped.

SQL>

SQL>

SQL> DROP TRIGGER CustomerSequence\_Trg;

Trigger CUSTOMERSEQUENCE\_TRG dropped.

SQL> DROP TRIGGER PaymentMethodSequence\_Trg;

Trigger PAYMENTMETHODSEQUENCE\_TRG dropped.

SQL> DROP TRIGGER SubscriptionSequence\_Trg;

Trigger SUBSCRIPTIONSEQUENCE\_TRG dropped.

SQL> DROP TRIGGER InvoiceSequence\_Trg;

Trigger INVOICESEQUENCE\_TRG dropped.

SQL> DROP TRIGGER ProductChargeSequence\_Trg;

Trigger PRODUCTCHARGESEQUENCE\_TRG dropped.

SQL> DROP TRIGGER ProductSequence\_Trg;

Trigger PRODUCTSEQUENCE\_TRG dropped.

SQL> DROP TRIGGER SubscriptionProductChargeSequence\_Trg;

Trigger SUBSCRIPTIONPRODUCTCHARGESEQUENCE\_TRG dropped.

SQL> DROP TRIGGER PaymentSequence\_Trg;

Trigger PAYMENTSEQUENCE\_TRG dropped.

SQL> DROP TRIGGER SubscriptionAudit\_Trg;

Trigger SUBSCRIPTIONAUDIT\_TRG dropped.

SQL> DROP TRIGGER ProductCharge\_Trg;

Trigger PRODUCTCHARGE\_TRG dropped.

SQL>

SQL> DROP TABLE Payment CASCADE CONSTRAINTS;

Table PAYMENT dropped.

SQL> DROP TABLE SubscriptionProductCharge CASCADE CONSTRAINTS;

Table SUBSCRIPTIONPRODUCTCHARGE dropped.

SQL> DROP TABLE ProductCharge CASCADE CONSTRAINTS;

Table PRODUCTCHARGE dropped.

SQL> DROP TABLE Product CASCADE CONSTRAINTS;

Table PRODUCT dropped.

SQL> DROP TABLE Invoice CASCADE CONSTRAINTS;

Table INVOICE dropped.

SQL> DROP TABLE Subscription CASCADE CONSTRAINTS;

Table SUBSCRIPTION dropped.

SQL> DROP TABLE PaymentMethod CASCADE CONSTRAINTS;

Table PAYMENTMETHOD dropped.

SQL> DROP TABLE Customer CASCADE CONSTRAINTS;

Table CUSTOMER dropped.

SQL> DROP TABLE SubscriptionAudit CASCADE CONSTRAINTS;

Table SUBSCRIPTIONAUDIT dropped.

SQL> DROP TABLE ProductChargeAudit CASCADE CONSTRAINTS;

Table PRODUCTCHARGEAUDIT dropped.

SQL>

SQL> PROMPT === Drop Sequences ===

=== Drop Sequences ===

SQL> DROP SEQUENCE PaymentId\_Seq;

Sequence PAYMENTID\_SEQ dropped.

SQL> DROP SEQUENCE SubscriptionProductChargeId\_Seq;

Sequence SUBSCRIPTIONPRODUCTCHARGEID\_SEQ dropped.

SQL> DROP SEQUENCE ProductId\_Seq;

Sequence PRODUCTID\_SEQ dropped.

SQL> DROP SEQUENCE ProductChargeId\_Seq;

Sequence PRODUCTCHARGEID\_SEQ dropped.

SQL> DROP SEQUENCE InvoiceId\_Seq;

Sequence INVOICEID\_SEQ dropped.

SQL> DROP SEQUENCE SubscriptionId\_Seq;

Sequence SUBSCRIPTIONID\_SEQ dropped.

SQL> DROP SEQUENCE PaymentMethodId\_Seq;

Sequence PAYMENTMETHODID\_SEQ dropped.

SQL> DROP SEQUENCE CustomerId\_Seq;

Sequence CUSTOMERID\_SEQ dropped.

SQL>

SQL> /\*\* Creating Tables \*\*/

SQL> PROMPT Creating Table 'Customer'

Creating Table 'Customer'

SQL> CREATE TABLE Customer

2 (CustomerId NUMBER(8,0)

3 ,FirstName VARCHAR2(25)

4 ,LastName VARCHAR2(25)

5 ,Email VARCHAR2(50)

6 ,PhoneNumber VARCHAR2(15)

7 ,AutoPay Char(1)

8 ,Address1 VARCHAR2(50)

9 ,Address2 VARCHAR2(50)

10 ,City VARCHAR2(50)

11 ,Country VARCHAR2(50)

12 ,PostalCode VARCHAR2(20)

13 ,CreatedBy VARCHAR2(30)

14 ,CreatedDate DATE

15 ,ModifiedBy VARCHAR2(30)

16 ,ModifiedDate DATE

17 );

Table CUSTOMER created.

SQL>

SQL> PROMPT Creating Table 'PaymentMethod'

Creating Table 'PaymentMethod'

SQL> CREATE TABLE PaymentMethod

2 (PaymentMethodId NUMBER(8,0)

3 ,CustomerId NUMBER(8,0)

4 ,CCName VARCHAR2(25)

5 ,CCNumber VARCHAR2(25)

6 ,CCType VARCHAR2(10)

7 ,Address1 VARCHAR2(50)

8 ,Address2 VARCHAR2(50)

9 ,City VARCHAR2(50)

10 ,Country VARCHAR2(50)

11 ,PostalCode VARCHAR2(20)

12 ,PaymentRefId VARCHAR2(50)

13 ,CCExpiryMonth VARCHAR2(20)

14 ,CCExpiryYear VARCHAR2(20)

15 ,CreatedBy VARCHAR2(30)

16 ,CreatedDate DATE

17 ,ModifiedBy VARCHAR2(30)

18 ,ModifiedDate DATE

19 );

Table PAYMENTMETHOD created.

SQL>

SQL> PROMPT Creating Table 'Subscription'

Creating Table 'Subscription'

SQL> CREATE TABLE Subscription

2 (SubscriptionId NUMBER(8,0)

3 ,CustomerId NUMBER(8,0)

4 ,TermStartDate DATE

5 ,TermEndDate DATE

6 ,TermType VARCHAR2(50)

7 ,Status VARCHAR2(10)

8 ,Name VARCHAR2(50)

9 ,ProductId NUMBER(8,0)

10 ,TermDays NUMBER(8,0)

11 ,CreatedBy VARCHAR2(30)

12 ,CreatedDate DATE

13 ,ModifiedBy VARCHAR2(30)

14 ,ModifiedDate DATE

15 );

Table SUBSCRIPTION created.

SQL>

SQL> PROMPT Creating Table 'Invoice'

Creating Table 'Invoice'

SQL> CREATE TABLE Invoice

2 (InvoiceId NUMBER(8,0)

3 ,SubscriptionId NUMBER(8,0)

4 ,Amount NUMBER(9,2)

5 ,BalanceAmount NUMBER(9,2)

6 ,TaxAmount NUMBER(9,2)

7 ,CreatedBy VARCHAR2(30)

8 ,CreatedDate DATE

9 ,ModifiedBy VARCHAR2(30)

10 ,ModifiedDate DATE

11 );

Table INVOICE created.

SQL>

SQL> PROMPT Creating Table 'Product'

Creating Table 'Product'

SQL> CREATE TABLE Product

2 (ProductId NUMBER(8,0)

3 ,ProductName VARCHAR2(50)

4 ,ProductDescription VARCHAR2(50)

5 ,CreatedBy VARCHAR2(30)

6 ,CreatedDate DATE

7 ,ModifiedBy VARCHAR2(30)

8 ,ModifiedDate DATE

9 );

Table PRODUCT created.

SQL>

SQL> PROMPT Creating Table 'ProductCharge'

Creating Table 'ProductCharge'

SQL> CREATE TABLE ProductCharge

2 (ProductChargeId NUMBER(8,0)

3 ,ProductId NUMBER(8,0)

4 ,ProductChargeName VARCHAR2(50)

5 ,ProductChargeDescription VARCHAR2(50)

6 ,ProductChargeType VARCHAR2(50)

7 ,Amount NUMBER(9,2)

8 ,TaxAmount NUMBER(9,2)

9 ,CreatedBy VARCHAR2(30)

10 ,CreatedDate DATE

11 ,ModifiedBy VARCHAR2(30)

12 ,ModifiedDate DATE

13 );

Table PRODUCTCHARGE created.

SQL>

SQL> PROMPT Creating Table 'SubscriptionProductCharge'

Creating Table 'SubscriptionProductCharge'

SQL> CREATE TABLE SubscriptionProductCharge

2 (SubscriptionProductChargeId NUMBER(8,0)

3 ,SubscriptionId NUMBER(8,0)

4 ,ProductChargeId NUMBER(8,0)

5 ,CreatedBy VARCHAR2(30)

6 ,CreatedDate DATE

7 ,ModifiedBy VARCHAR2(30)

8 ,ModifiedDate DATE

9 );

Table SUBSCRIPTIONPRODUCTCHARGE created.

SQL>

SQL> PROMPT Creating Table 'Payment'

Creating Table 'Payment'

SQL> CREATE TABLE Payment

2 (PaymentId NUMBER(8,0)

3 ,PaymentMethodId NUMBER(8,0)

4 ,InvoiceId NUMBER(8,0)

5 ,PaymentAmount NUMBER(9,2)

6 ,TaxAmount NUMBER(9,2)

7 ,CreatedBy VARCHAR2(30)

8 ,CreatedDate DATE

9 ,ModifiedBy VARCHAR2(30)

10 ,ModifiedDate DATE

11 );

Table PAYMENT created.

SQL>

SQL> PROMPT Creating Table 'ProductCharge\_Audit'

Creating Table 'ProductCharge\_Audit'

SQL> CREATE TABLE ProductChargeAudit (

2 ProductChargeAuditId NUMBER,

3 ModifiedBy VARCHAR2(30),

4 ModifiedDate DATE

5 );

Table PRODUCTCHARGEAUDIT created.

SQL>

SQL> PROMPT Creating Table 'Subscription\_Audit'

Creating Table 'Subscription\_Audit'

SQL> CREATE TABLE SubscriptionAudit (

2 SubscriptionAuditId NUMBER,

3 ModifiedBy VARCHAR2(30),

4 ModifiedDate DATE

5 );

Table SUBSCRIPTIONAUDIT created.

SQL>

SQL>

SQL> -- Creatng Indexes

SQL>

SQL> PROMPT Creating Index 'Cust\_PMethod\_FK\_I'

Creating Index 'Cust\_PMethod\_FK\_I'

SQL> CREATE INDEX Cust\_PMethod\_FK\_I ON PaymentMethod

2 (CustomerId);

Index CUST\_PMETHOD\_FK\_I created.

SQL> /

SQL>

SQL> PROMPT Creating Index 'Sub\_Inv\_FK\_I'

Creating Index 'Sub\_Inv\_FK\_I'

SQL> CREATE INDEX Sub\_Inv\_FK\_I ON Invoice

2 (SubscriptionId);

Index SUB\_INV\_FK\_I created.

SQL> /

SQL>

SQL> PROMPT Creating Index 'Inv\_Pmt\_FK\_I'

Creating Index 'Inv\_Pmt\_FK\_I'

SQL> CREATE INDEX Inv\_Pmt\_FK\_I ON Payment

2 (InvoiceId);

Index INV\_PMT\_FK\_I created.

SQL> /

SQL>

SQL> PROMPT Creating Index 'Sub\_productCharge\_FK\_I'

Creating Index 'Sub\_productCharge\_FK\_I'

SQL> CREATE INDEX Sub\_ProductCharge\_FK\_I ON SubscriptionProductCharge

2 (SubscriptionId);

Index SUB\_PRODUCTCHARGE\_FK\_I created.

SQL> /

SQL>

SQL>

SQL> PROMPT Creating Index 'Cust\_Sub\_FK\_I'

Creating Index 'Cust\_Sub\_FK\_I'

SQL> CREATE INDEX Cust\_Sub\_FK\_I ON Subscription

2 (CustomerId);

Index CUST\_SUB\_FK\_I created.

SQL> /

SQL>

SQL> PROMPT Creating Index 'Prod\_Sub\_FK\_I'

Creating Index 'Prod\_Sub\_FK\_I'

SQL> CREATE INDEX Prod\_Sub\_FK\_I ON Subscription

2 (ProductId);

Index PROD\_SUB\_FK\_I created.

SQL> /

SQL> --PROMPT subscription.con

SQL>

SQL> PROMPT Creating Check Constraints on 'Customer'

Creating Check Constraints on 'Customer'

SQL> ALTER TABLE Customer

2 MODIFY(ModifiedBy CONSTRAINT Cust\_Modified\_By\_NNull NOT NULL)

3 MODIFY(CreatedBy CONSTRAINT Cust\_Created\_By\_NNull NOT NULL)

4 MODIFY(CreatedDate CONSTRAINT Cust\_Created\_Date\_NNull NOT NULL)

5 MODIFY(ModifiedDate CONSTRAINT Cust\_Modified\_Date\_NNull NOT NULL);

Table CUSTOMER altered.

SQL> /

SQL>

SQL>

SQL> PROMPT Creating Check Constraints on 'PaymentMethod'

Creating Check Constraints on 'PaymentMethod'

SQL> ALTER TABLE PaymentMethod

2 MODIFY(CCName CONSTRAINT PMethod\_CCName\_NNull NOT NULL)

3 MODIFY(CCNumber CONSTRAINT PMethod\_CCNumber\_NNull NOT NULL)

4 MODIFY(CCType CONSTRAINT PMethod\_CCType\_NNull NOT NULL)

5 MODIFY(PaymentRefId CONSTRAINT PMethod\_PaymentRefId\_NNull NOT NULL)

6 MODIFY(Address1 CONSTRAINT PMethod\_Address1\_NNull NOT NULL)

7 MODIFY(City CONSTRAINT PMethod\_City\_NNull NOT NULL)

8 MODIFY(Country CONSTRAINT PMethod\_Country\_NNull NOT NULL)

9 MODIFY(PostalCode CONSTRAINT PMethod\_PostalCode\_NNull NOT NULL)

10 MODIFY(CCExpiryMonth CONSTRAINT PMethod\_CCExpiryMonth\_NNull NOT NULL)

11 MODIFY(CCExpiryYear CONSTRAINT PMethod\_CCExpiryYear\_NNull NOT NULL)

12 MODIFY(CustomerId CONSTRAINT PMethod\_Customer\_Id\_NNull NOT NULL)

13 MODIFY(ModifiedBy CONSTRAINT PMethod\_Modified\_By\_NNull NOT NULL)

14 MODIFY(CreatedBy CONSTRAINT PMethod\_Created\_By\_NNull NOT NULL)

15 MODIFY(CreatedDate CONSTRAINT PMethod\_Created\_Date\_NNull NOT NULL)

16 MODIFY(ModifiedDate CONSTRAINT PMethod\_Modified\_Date\_NNull NOT NULL);

Table PAYMENTMETHOD altered.

SQL> /

SQL>

SQL> PROMPT Creating Check Constraints on 'Subscription'

Creating Check Constraints on 'Subscription'

SQL> ALTER TABLE Subscription

2 MODIFY(Name CONSTRAINT Sub\_Name\_NNull NOT NULL)

3 MODIFY(TermType CONSTRAINT Sub\_TermType\_NNull NOT NULL)

4 MODIFY(TermEndDate CONSTRAINT Sub\_TermEndDate\_NNull NOT NULL)

5 MODIFY(TermStartDate CONSTRAINT Sub\_TermStartDate\_NNull NOT NULL)

6 MODIFY(ModifiedBy CONSTRAINT Sub\_Modified\_By\_NNull NOT NULL)

7 MODIFY(CreatedBy CONSTRAINT Sub\_Created\_By\_NNull NOT NULL)

8 MODIFY(CreatedDate CONSTRAINT Sub\_Created\_Date\_NNull NOT NULL)

9 MODIFY(ModifiedDate CONSTRAINT Sub\_Modified\_Date\_NNull NOT NULL);

Table SUBSCRIPTION altered.

SQL> /

SQL>

SQL> PROMPT Creating Check Constraints on 'Invoice'

Creating Check Constraints on 'Invoice'

SQL> ALTER TABLE Invoice

2 MODIFY(SubscriptionId CONSTRAINT Inv\_Sub\_Id\_NNull NOT NULL)

3 MODIFY(ModifiedBy CONSTRAINT Inv\_Modified\_By\_NNull NOT NULL)

4 MODIFY(CreatedBy CONSTRAINT Inv\_Created\_By\_NNull NOT NULL)

5 MODIFY(CreatedDate CONSTRAINT Inv\_Created\_Date\_NNull NOT NULL)

6 MODIFY(ModifiedDate CONSTRAINT Inv\_Modified\_Date\_NNull NOT NULL);

Table INVOICE altered.

SQL> /

SQL>

SQL> PROMPT Creating Check Constraints on 'Payment'

Creating Check Constraints on 'Payment'

SQL> ALTER TABLE Payment

2 MODIFY(InvoiceId CONSTRAINT Pmt\_Inv\_Id\_NNull NOT NULL)

3 MODIFY(ModifiedBy CONSTRAINT Pmt\_Modified\_By\_NNull NOT NULL)

4 MODIFY(CreatedBy CONSTRAINT Pmt\_Created\_By\_NNull NOT NULL)

5 MODIFY(CreatedDate CONSTRAINT Pmt\_Created\_Date\_NNull NOT NULL)

6 MODIFY(ModifiedDate CONSTRAINT Pmt\_Modified\_Date\_NNull NOT NULL);

Table PAYMENT altered.

SQL> /

SQL>

SQL>

SQL> PROMPT Creating Check Constraints on 'Product'

Creating Check Constraints on 'Product'

SQL> ALTER TABLE Product

2 MODIFY(ModifiedBy CONSTRAINT Prd\_Modified\_By\_NNull NOT NULL)

3 MODIFY(CreatedBy CONSTRAINT Prd\_Created\_By\_NNull NOT NULL)

4 MODIFY(CreatedDate CONSTRAINT Prd\_Created\_Date\_NNull NOT NULL)

5 MODIFY(ModifiedDate CONSTRAINT Prd\_Modified\_Date\_NNull NOT NULL);

Table PRODUCT altered.

SQL> /

SQL>

SQL>

SQL> PROMPT Creating Check Constraints on 'ProductCharge'

Creating Check Constraints on 'ProductCharge'

SQL> ALTER TABLE ProductCharge

2 MODIFY(ProductId CONSTRAINT PrdCharge\_Prd\_Id\_NNull NOT NULL)

3 MODIFY(ModifiedBy CONSTRAINT PrdCharge\_Modified\_By\_NNull NOT NULL)

4 MODIFY(CreatedBy CONSTRAINT PrdCharge\_Created\_By\_NNull NOT NULL)

5 MODIFY(CreatedDate CONSTRAINT PrdCharge\_Created\_Date\_NNull NOT NULL)

6 MODIFY(ModifiedDate CONSTRAINT PrdCharge\_Modified\_Date\_NNull NOT NULL);

Table PRODUCTCHARGE altered.

SQL> /

SQL>

SQL>

SQL> PROMPT Creating Check Constraints on 'SubscriptionProductCharge'

Creating Check Constraints on 'SubscriptionProductCharge'

SQL> ALTER TABLE SubscriptionProductCharge

2 MODIFY(ProductChargeId CONSTRAINT SubPrdCharge\_Prd\_Id\_NNull NOT NULL)

3 MODIFY(ModifiedBy CONSTRAINT SubPrdCharge\_Modified\_By\_NNull NOT NULL)

4 MODIFY(CreatedBy CONSTRAINT SubPrdCharge\_Created\_By\_NNull NOT NULL)

5 MODIFY(CreatedDate CONSTRAINT SubPrdCharge\_Created\_Date\_NNull NOT NULL)

6 MODIFY(ModifiedDate CONSTRAINT SubPrdCharge\_Modified\_Date\_NNull NOT NULL);

Table SUBSCRIPTIONPRODUCTCHARGE altered.

SQL> /

SQL>

SQL> PROMPT Creating Check Constraints on 'SubscriptionAudit'

Creating Check Constraints on 'SubscriptionAudit'

SQL> ALTER TABLE SubscriptionAudit

2 MODIFY(ModifiedBy CONSTRAINT SubAud\_Modified\_By\_NNull NOT NULL)

3 MODIFY(ModifiedDate CONSTRAINT SubAud\_Modified\_Date\_NNull NOT NULL);

Table SUBSCRIPTIONAUDIT altered.

SQL> /

SQL>

SQL> PROMPT Creating Check Constraints on 'ProductChargeAudit'

Creating Check Constraints on 'ProductChargeAudit'

SQL> ALTER TABLE ProductChargeAudit

2 MODIFY(ModifiedBy CONSTRAINT PrdChargeAud\_Modified\_By\_NNull NOT NULL)

3 MODIFY(ModifiedDate CONSTRAINT PrdChargeAud\_Modified\_Date\_NNull NOT NULL);

Table PRODUCTCHARGEAUDIT altered.

SQL> /

SQL>

SQL>

SQL> PROMPT Creating Primary Key on 'Customer'

Creating Primary Key on 'Customer'

SQL> ALTER TABLE Customer

2 ADD CONSTRAINT Cust\_PK PRIMARY KEY

3 (CustomerId);

Table CUSTOMER altered.

SQL> /

SQL>

SQL> PROMPT Creating Primary Key on 'PaymentMethod'

Creating Primary Key on 'PaymentMethod'

SQL> ALTER TABLE PaymentMethod

2 ADD CONSTRAINT PmtMethod\_PK PRIMARY KEY

3 (PaymentMethodId);

Table PAYMENTMETHOD altered.

SQL> /

SQL>

SQL> PROMPT Creating Primary Key on 'Subscription'

Creating Primary Key on 'Subscription'

SQL> ALTER TABLE Subscription

2 ADD CONSTRAINT Sub\_PK PRIMARY KEY

3 (SubscriptionId);

Table SUBSCRIPTION altered.

SQL> /

SQL>

SQL> PROMPT Creating Primary Key on 'Invoice'

Creating Primary Key on 'Invoice'

SQL> ALTER TABLE Invoice

2 ADD CONSTRAINT Inv\_PK PRIMARY KEY

3 (InvoiceId);

Table INVOICE altered.

SQL> /

SQL>

SQL> PROMPT Creating Primary Key on 'Product'

Creating Primary Key on 'Product'

SQL> ALTER TABLE Product

2 ADD CONSTRAINT Prod\_PK PRIMARY KEY

3 (ProductId);

Table PRODUCT altered.

SQL> /

SQL>

SQL> PROMPT Creating Primary Key on 'ProductCharge'

Creating Primary Key on 'ProductCharge'

SQL> ALTER TABLE ProductCharge

2 ADD CONSTRAINT PCharge\_PK PRIMARY KEY

3 (ProductChargeId);

Table PRODUCTCHARGE altered.

SQL> /

SQL>

SQL> PROMPT Creating Primary Key on 'SubscriptionProductCharge'

Creating Primary Key on 'SubscriptionProductCharge'

SQL> ALTER TABLE SubscriptionProductCharge

2 ADD CONSTRAINT SPC\_PK PRIMARY KEY

3 (SubscriptionProductChargeId);

Table SUBSCRIPTIONPRODUCTCHARGE altered.

SQL> /

SQL>

SQL> PROMPT Creating Primary Key on 'Payment'

Creating Primary Key on 'Payment'

SQL> ALTER TABLE Payment

2 ADD CONSTRAINT Pmt\_PK PRIMARY KEY

3 (PaymentId);

Table PAYMENT altered.

SQL> /

SQL>

SQL> PROMPT Creating Primary Key on 'SubscriptionAudit'

Creating Primary Key on 'SubscriptionAudit'

SQL> ALTER TABLE SubscriptionAudit

2 ADD CONSTRAINT SubAudit\_PK PRIMARY KEY

3 (SubscriptionAuditId);

Table SUBSCRIPTIONAUDIT altered.

SQL> /

SQL>

SQL> PROMPT Creating Primary Key on 'ProductChargeAudit'

Creating Primary Key on 'ProductChargeAudit'

SQL> ALTER TABLE ProductChargeAudit

2 ADD CONSTRAINT ProdChargeAudit\_PK PRIMARY KEY

3 (ProductChargeAuditId);

Table PRODUCTCHARGEAUDIT altered.

SQL> /

SQL>

SQL>

SQL>

SQL> PROMPT Creating Foreign Keys on 'PaymentMethod'

Creating Foreign Keys on 'PaymentMethod'

SQL> ALTER TABLE PaymentMethod ADD CONSTRAINT

2 Cust\_PMethod\_FK FOREIGN KEY

3 (CustomerId) REFERENCES Customer

4 (CustomerId);

Table PAYMENTMETHOD altered.

SQL> /

SQL>

SQL> PROMPT Creating Foreign Keys on 'Invoice'

Creating Foreign Keys on 'Invoice'

SQL> ALTER TABLE Invoice ADD CONSTRAINT

2 Sub\_Inv\_FK FOREIGN KEY

3 (SubscriptionId) REFERENCES Subscription

4 (SubscriptionId);

Table INVOICE altered.

SQL> /

SQL>

SQL>

SQL> PROMPT Creating Foreign Keys on 'ProductCharge'

Creating Foreign Keys on 'ProductCharge'

SQL> ALTER TABLE ProductCharge ADD CONSTRAINT

2 Pdct\_Charge\_FK FOREIGN KEY

3 (ProductId) REFERENCES Product

4 (ProductId);

Table PRODUCTCHARGE altered.

SQL> /

SQL>

SQL> PROMPT Creating Foreign Keys on 'SubscriptionProductCharge'

Creating Foreign Keys on 'SubscriptionProductCharge'

SQL> ALTER TABLE SubscriptionProductCharge ADD CONSTRAINT

2 Sub\_Charge\_FK FOREIGN KEY

3 (SubscriptionId) REFERENCES Subscription

4 (SubscriptionId);

Table SUBSCRIPTIONPRODUCTCHARGE altered.

SQL> /

SQL>

SQL> ALTER TABLE SubscriptionProductCharge ADD CONSTRAINT

2 Sub\_Pdct\_Charge\_FK FOREIGN KEY

3 (ProductChargeId) REFERENCES ProductCharge

4 (ProductChargeId);

Table SUBSCRIPTIONPRODUCTCHARGE altered.

SQL> /

SQL>

SQL> PROMPT Creating Foreign Keys on 'Payment'

Creating Foreign Keys on 'Payment'

SQL> ALTER TABLE Payment ADD CONSTRAINT

2 Sub\_Pmt\_FK FOREIGN KEY

3 (InvoiceId) REFERENCES Invoice

4 (InvoiceId);

Table PAYMENT altered.

SQL> /

SQL>

SQL> PROMPT Creating Foreign Keys on 'Subscription'

Creating Foreign Keys on 'Subscription'

SQL> ALTER TABLE Subscription ADD CONSTRAINT

2 Cus\_Sub\_FK FOREIGN KEY

3 (CustomerId) REFERENCES Customer

4 (CustomerId);

Table SUBSCRIPTION altered.

SQL> /

SQL>

SQL> ALTER TABLE Subscription ADD CONSTRAINT

2 Product\_Sub\_FK FOREIGN KEY

3 (ProductId) REFERENCES Product

4 (ProductId);

Table SUBSCRIPTION altered.

SQL> /

SQL>

SQL>

SQL> --PROMPT subscription.sqs

SQL>

SQL> PROMPT Creating Sequence 'PaymentId\_SEQ'

Creating Sequence 'PaymentId\_SEQ'

SQL> CREATE SEQUENCE PaymentId\_Seq

2 INCREMENT BY 1

3 START WITH 1

4 NOMAXVALUE

5 MINVALUE 1

6 NOCYCLE

7 NOCACHE

8 /

Sequence PAYMENTID\_SEQ created.

SQL>

SQL> PROMPT Creating Sequence 'SubscriptionProductChargeId\_Seq'

Creating Sequence 'SubscriptionProductChargeId\_Seq'

SQL> CREATE SEQUENCE SubscriptionProductChargeId\_Seq

2 INCREMENT BY 1

3 START WITH 1

4 NOMAXVALUE

5 MINVALUE 1

6 NOCYCLE

7 NOCACHE

8 /

Sequence SUBSCRIPTIONPRODUCTCHARGEID\_SEQ created.

SQL>

SQL> PROMPT Creating Sequence 'InvoiceId\_Seq'

Creating Sequence 'InvoiceId\_Seq'

SQL> CREATE SEQUENCE InvoiceId\_Seq

2 INCREMENT BY 1

3 START WITH 1

4 NOMAXVALUE

5 MINVALUE 1

6 NOCYCLE

7 NOCACHE

8 /

Sequence INVOICEID\_SEQ created.

SQL>

SQL> PROMPT Creating Sequence 'SubscriptionId\_Seq'

Creating Sequence 'SubscriptionId\_Seq'

SQL> CREATE SEQUENCE SubscriptionId\_Seq

2 INCREMENT BY 1

3 START WITH 1

4 NOMAXVALUE

5 MINVALUE 1

6 NOCYCLE

7 NOCACHE

8 /

Sequence SUBSCRIPTIONID\_SEQ created.

SQL>

SQL> PROMPT Creating Sequence 'ProductId\_Seq'

Creating Sequence 'ProductId\_Seq'

SQL> CREATE SEQUENCE ProductId\_Seq

2 INCREMENT BY 1

3 START WITH 1

4 NOMAXVALUE

5 MINVALUE 1

6 NOCYCLE

7 NOCACHE

8 /

Sequence PRODUCTID\_SEQ created.

SQL>

SQL> PROMPT Creating Sequence 'ProductChargeId\_Seq'

Creating Sequence 'ProductChargeId\_Seq'

SQL> CREATE SEQUENCE ProductChargeId\_Seq

2 INCREMENT BY 1

3 START WITH 1

4 NOMAXVALUE

5 MINVALUE 1

6 NOCYCLE

7 NOCACHE

8 /

Sequence PRODUCTCHARGEID\_SEQ created.

SQL>

SQL> PROMPT Creating Sequence 'CustomerId\_Seq'

Creating Sequence 'CustomerId\_Seq'

SQL> CREATE SEQUENCE CustomerId\_Seq

2 INCREMENT BY 1

3 START WITH 1

4 NOMAXVALUE

5 MINVALUE 1

6 NOCYCLE

7 NOCACHE

8 /

Sequence CUSTOMERID\_SEQ created.

SQL>

SQL> PROMPT Creating Sequence 'PaymentMethodId\_Seq'

Creating Sequence 'PaymentMethodId\_Seq'

SQL> CREATE SEQUENCE PaymentMethodId\_Seq

2 INCREMENT BY 1

3 START WITH 1

4 NOMAXVALUE

5 MINVALUE 1

6 NOCYCLE

7 NOCACHE

8 /

Sequence PAYMENTMETHODID\_SEQ created.

SQL>

SQL> /\*\* Creating Views \*\*/

SQL>

SQL> PROMPT Creating View 'Customer\_Subscription\_View'

Creating View 'Customer\_Subscription\_View'

SQL> CREATE VIEW Customer\_Subscription\_View AS

2 SELECT c.FirstName, s.Name, s.TermType, s.TermStartDate, s.TermEndDate

3 FROM Customer c

4 JOIN Subscription s

5 ON c.CustomerId = s.CustomerId;

View CUSTOMER\_SUBSCRIPTION\_VIEW created.

SQL>

SQL> PROMPT Creating View 'Product\_Charge\_View'

Creating View 'Product\_Charge\_View'

SQL> CREATE VIEW Product\_Charge\_View AS

2 SELECT p.ProductName, p.ProductDescription,

3 c.ProductChargeName, c.ProductChargeType

4 FROM Product p

5 JOIN ProductCharge c

6 ON p.ProductId = c.ProductId;

View PRODUCT\_CHARGE\_VIEW created.

SQL>

SQL> /\*\* Creating Triggers \*\*/

SQL> PROMPT Creating View 'SubscriptionAudit\_Trg'

Creating View 'SubscriptionAudit\_Trg'

SQL> CREATE OR REPLACE TRIGGER SubscriptionAudit\_Trg

2 AFTER

3 UPDATE OR DELETE

4 ON Subscription

5 FOR EACH ROW

6 DECLARE

7 l\_transaction VARCHAR2(10);

8 BEGIN

9 -- determine the transaction type

10 l\_transaction := CASE

11 WHEN UPDATING THEN 'UPDATE'

12 WHEN DELETING THEN 'DELETE'

13 END;

14

15 -- insert a row into the Subscription\_Audit table

16 INSERT INTO SubscriptionAudit (ModifiedBy, ModifiedDate)

17 VALUES(USER, SYSDATE);

18 END;

19 /

Trigger SUBSCRIPTIONAUDIT\_TRG compiled

SQL>

SQL> CREATE OR REPLACE TRIGGER ProductCharge\_Trg

2 AFTER

3 UPDATE OR DELETE

4 ON ProductCharge

5 FOR EACH ROW

6 DECLARE

7 l\_transaction VARCHAR2(10);

8 BEGIN

9 -- determine the transaction type

10 l\_transaction := CASE

11 WHEN UPDATING THEN 'UPDATE'

12 WHEN DELETING THEN 'DELETE'

13 END;

14

15 -- insert a row into the ProductCharge\_Audit table

16 INSERT INTO ProductChargeAudit (ModifiedBy, ModifiedDate)

17 VALUES(USER, SYSDATE);

18 END;

19 /

Trigger PRODUCTCHARGE\_TRG compiled

SQL>

SQL>

SQL> CREATE OR REPLACE TRIGGER CustomerSequence\_Trg

2 BEFORE INSERT ON Customer

3 FOR EACH ROW

4 BEGIN

5 :new.CustomerId := CustomerId\_Seq.NEXTVAL;

6 END;

7 /

Trigger CUSTOMERSEQUENCE\_TRG compiled

SQL>

SQL> CREATE OR REPLACE TRIGGER PaymentMethodSequence\_Trg

2 BEFORE INSERT ON PaymentMethod

3 FOR EACH ROW

4 BEGIN

5 :new.PaymentMethodId := PaymentMethodId\_Seq.NEXTVAL;

6 END;

7 /

Trigger PAYMENTMETHODSEQUENCE\_TRG compiled

SQL>

SQL> CREATE OR REPLACE TRIGGER SubscriptionSequence\_Trg

2 BEFORE INSERT ON Subscription

3 FOR EACH ROW

4 BEGIN

5 :new.SubscriptionId := SubscriptionId\_Seq.NEXTVAL;

6 END;

7 /

Trigger SUBSCRIPTIONSEQUENCE\_TRG compiled

SQL>

SQL> CREATE OR REPLACE TRIGGER InvoiceSequence\_Trg

2 BEFORE INSERT ON Invoice

3 FOR EACH ROW

4 BEGIN

5 :new.InvoiceId := InvoiceId\_Seq.NEXTVAL;

6 END;

7 /

Trigger INVOICESEQUENCE\_TRG compiled

SQL>

SQL> CREATE OR REPLACE TRIGGER ProductChargeSequence\_Trg

2 BEFORE INSERT ON ProductCharge

3 FOR EACH ROW

4 BEGIN

5 :new.ProductChargeId := ProductChargeId\_Seq.NEXTVAL;

6 END;

7 /

Trigger PRODUCTCHARGESEQUENCE\_TRG compiled

SQL>

SQL> CREATE OR REPLACE TRIGGER ProductSequence\_Trg

2 BEFORE INSERT ON Product

3 FOR EACH ROW

4 BEGIN

5 :new.ProductId := ProductId\_Seq.NEXTVAL;

6 END;

7 /

Trigger PRODUCTSEQUENCE\_TRG compiled

SQL>

SQL> CREATE OR REPLACE TRIGGER SubscriptionProductChargeSequence\_Trg

2 BEFORE INSERT ON SubscriptionProductCharge

3 FOR EACH ROW

4 BEGIN

5 :new.SubscriptionProductChargeId := SubscriptionProductChargeId\_Seq.NEXTVAL;

6 END;

7 /

Trigger SUBSCRIPTIONPRODUCTCHARGESEQUENCE\_TRG compiled

SQL>

SQL> CREATE OR REPLACE TRIGGER PaymentSequence\_Trg

2 BEFORE INSERT ON Payment

3 FOR EACH ROW

4 BEGIN

5 :new.PaymentId := PaymentId\_Seq.NEXTVAL;

6 END;

7 /

Trigger PAYMENTSEQUENCE\_TRG compiled