**PROJECT DELIVARABLE 3**

**/\* METADATA TABLE CREATION AND INSERTION \*/**

DROP TABLE METADATA\_TBL CASCADE CONSTRAINTS;

CREATE TABLE METADATA\_TBL(CNL\_TABLE\_NAME VARCHAR(255), CNL\_COLUMN\_NAME VARCHAR(255),CNL\_DATA\_TYPE VARCHAR(255),DB1\_TABLE\_NAME VARCHAR(255),DB1\_COLUMN\_NAME VARCHAR(255),DB1\_DATA\_TYPE VARCHAR(255),DB1\_FUNCTION VARCHAR2(4000),DB2\_TABLE\_NAME VARCHAR(255),DB2\_COLUMN\_NAME VARCHAR(255),DB2\_DATA\_TYPE VARCHAR(255),DB2\_FUNCTION VARCHAR2(4000), DB3\_TABLE\_NAME VARCHAR(255),DB3\_COLUMN\_NAME VARCHAR(255),DB3\_DATA\_TYPE VARCHAR(255),DB3\_FUNCTION VARCHAR2(4000));

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('BOOKS', 'BK\_ID', 'NUMBER', 'BOOKS\_TBL', 'ID', 'NUMBER', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('BOOKS', 'ISBN', 'NUMBER', 'BOOKS\_TBL', 'ISBN', 'NUMBER', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('BOOKS', 'BK\_PRODUCT\_ID', 'NUMBER', 'BOOKS\_TBL', 'PRODUCT\_ID', 'NUMBER', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('BOOKS', 'BK\_TITLE', 'VARCHAR2', 'BOOKS\_TBL', 'TITLE', 'VARCHAR2', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('BOOKS', 'AUTHORS', 'VARCHAR2', 'BOOKS\_TBL', 'AUTHORS', 'VARCHAR2', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('BOOKS', 'BK\_PRICE', 'NUMBER', 'BOOKS\_TBL', 'PRICE', 'NUMBER', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('BOOKS', 'BK\_CATEGORY\_ID', 'NUMBER', 'BOOKS\_TBL', 'CATEGORY\_ID', 'NUMBER', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('BOOKS', 'BK\_DESCRIPTION', 'VARCHAR2', 'BOOKS\_TBL', 'DESCRIPTION', 'VARCHAR2', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('CATEGORY', 'CTG\_CATEGORY\_ID', 'NUMBER', 'CATEGORY\_TAB', 'CATEGORY\_ID', 'NUMBER', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('CATEGORY', 'CATEGORY', 'VARCHAR2', 'CATEGORY\_TAB', 'CATEGORY', 'VARCHAR2', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('CUSTOMERS', 'CMR\_CUST\_ID', 'NUMBER', 'CUSTOMERS\_TBL', 'CUST\_ID', 'NUMBER', null, 'CUSTOMER', 'CUSTOMER\_ID', 'NUMBER', null, 'CUST', 'CUST\_ID', 'NUMBER', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('CUSTOMERS', 'CUST\_NAME', 'VARCHAR2', 'CUSTOMERS\_TBL', 'CUST\_NAME', 'VARCHAR2', null, 'CUSTOMER', 'CUSTOMER\_NAME', 'VARCHAR2', null, 'CUST', 'CUST\_NAME', 'VARCHAR2', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('CUSTOMERS', 'ADDRESS', 'VARCHAR2', 'CUSTOMERS\_TBL', 'ADDRESS', 'VARCHAR2', null, 'CUSTOMER', 'ADDRESS', 'VARCHAR2', null, 'CUST', 'ADDR', 'VARCHAR2', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('CUSTOMERS', 'PH\_NO', 'NUMBER', 'CUSTOMERS\_TBL', 'PH\_NO', 'NUMBER', null, 'CUSTOMER', 'PHONE', 'NUMBER', null, 'CUST', 'PH\_NUMBER', 'NUMBER', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('GENRE', 'GENRE\_ID', 'NUMBER', 'GENRE\_TAB', 'GENRE\_ID', 'NUMBER', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('GENRE', 'GENRE', 'VARCHAR2', 'GENRE\_TAB', 'GENRE', 'VARCHAR2', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('MUSIC\_CD', 'MUSIC\_ID', 'NUMBER', 'MUSIC\_CD\_TBL', 'ID', 'NUMBER', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('MUSIC\_CD', 'MSC\_PRODUCT\_ID', 'NUMBER', 'MUSIC\_CD\_TBL', 'PRODUCT\_ID', 'NUMBER', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('MUSIC\_CD', 'MSC\_TITLE', 'VARCHAR2', 'MUSIC\_CD\_TBL', 'TITLE', 'VARCHAR2', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('MUSIC\_CD', 'ARTISTS', 'VARCHAR2', 'MUSIC\_CD\_TBL', 'ARTISTS', 'VARCHAR2', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('MUSIC\_CD', 'RECORD\_COMPANY', 'VARCHAR2', 'MUSIC\_CD\_TBL', 'RECORD\_COMPANY', 'VARCHAR2', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('MUSIC\_CD', 'MSC\_PRICE', 'NUMBER', 'MUSIC\_CD\_TBL', 'PRICE', 'NUMBER', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('MUSIC\_CD', 'MSC\_GENRE\_ID', 'NUMBER', 'MUSIC\_CD\_TBL', 'GENRE\_ID', 'NUMBER', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('MUSIC\_CD', 'MSC\_DESCRIPTION', 'VARCHAR2', 'MUSIC\_CD\_TBL', 'DESCRIPTION', 'VARCHAR2', null, null, null, null, null, null, null, null, null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('PRODUCT', 'PRODUCT\_ID', 'NUMBER', 'PRODUCT\_TAB', 'PRODUCT\_ID', 'NUMBER', null, 'PRODUCT', 'PRODUCT\_ID', 'NUMBER', null, 'PRD', 'PRD\_ID', 'NUMBER', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('PRODUCT', 'PRODUCT\_TYPE', 'VARCHAR2', 'PRODUCT\_TAB', 'PRODUCT\_TYPE', 'VARCHAR2', null, 'PRODUCT', 'PRODUCT\_TYPE', 'VARCHAR2', null, 'PRD', 'PRD\_TYPE', 'VARCHAR2', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('PRODUCT', 'TITLE', 'VARCHAR2', 'PRODUCT\_TAB', 'TITLE', 'VARCHAR2', null, 'PRODUCT', 'PRODUCT\_NAME', 'VARCHAR2', null, 'PRD', 'PRD\_NAME', 'VARCHAR2', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('PRODUCT', 'STOCK\_COUNT', 'NUMBER', 'PRODUCT\_TAB', 'STOCK\_COUNT', 'NUMBER', null, 'PRODUCT', 'PRODUCT\_QUANTITY', 'NUMBER', null, 'PRD', 'PRD\_QUANTITY', 'NUMBER', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('ORDER', 'PURCHASE\_ID', 'NUMBER', 'PURCHASES\_TBL', 'PURCHASE\_ID', 'NUMBER', null, 'ORDERS', 'ORDER\_ID', 'NUMBER', null, 'ORD\_TBL', 'ORDER\_ID', 'NUMBER', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('PURCHASE', 'PCH\_PRODUCT\_ID', 'NUMBER', 'PURCHASES\_TBL', 'PRODUCT\_ID', 'NUMBER', null, 'LINE\_ITEM', 'PRODUCT\_ID', 'NUMBER', null, 'SALES', 'PRD\_ID', 'NUMBER', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('ORDER', 'CUST\_ID', 'NUMBER', 'PURCHASES\_TBL', 'CUST\_ID', 'NUMBER', null, 'ORDERS', 'CUSTOMER\_ID', 'NUMBER', null, 'ORD\_TBL', 'CUST\_ID', 'NUMBER', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('PURCHASE', 'QUANTITY', 'NUMBER', 'PURCHASES\_TBL', 'QUANTITY', 'NUMBER', null, 'LINE\_ITEM', 'ITEM\_QUANTITY', 'NUMBER', null, 'SALES', 'ITEM\_QUANTITY', 'NUMBER', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('PURCHASE', 'AMOUNT', 'NUMBER', 'PURCHASES\_TBL', 'AMOUNT', 'NUMBER', null, 'LINE\_ITEM', 'PRICE\_PER\_UNIT', 'FLOAT', 'to\_number(''PRICE\_PER\_UNIT'')', 'SALES', 'PRICE\_PER\_UNIT', 'NUMBER', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('ORDER', 'SALE\_DATE', 'DATE', 'PURCHASES\_TBL', 'SALE\_DATE', 'DATE', null, 'ORDERS', 'ORDER\_DATE', 'DATE', null, 'ORD\_TBL', 'ORDER\_DATE', 'DATE', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('PRODUCT', 'PRD\_DESCRIPTION', 'VARCHAR2', 'PRODUCT\_TAB', null, null, null, 'PRODUCT', 'PRODUCT\_DESCRIPTION', 'VARCHAR2', null, 'PRD', 'PRD\_DESCRIPTION', 'VARCHAR2', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('CUSTOMERS', 'EMAIL', 'VARCHAR2', null, null, null, null, 'CUSTOMER', 'EMAIL', 'VARCHAR2', null, 'CUST', 'EMAIL', 'VARCHAR2', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('PURCHASE', 'ITEM\_ID', 'NUMBER', 'PURCHASES\_TBL', null, null, null, 'LINE\_ITEM', 'ITEM\_ID', 'NUMBER', null, 'SALES', 'SALE\_ID', 'NUMBER', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('PURCHASE', 'ORDER\_ID', 'NUMBER', 'PURCHASES\_TBL', null, null, null, 'LINE\_ITEM', 'ORDER\_ID', 'NUMBER', null, 'SALES', 'ORDER\_ID', 'NUMBER', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('PURCHASE', 'PCH\_DESCRIPTION', 'VARCHAR2', 'PURCHASES\_TBL', null, null, null, 'LINE\_ITEM', 'ITEM\_DESCRIPTION', 'VARCHAR2', null, 'SALES', 'SALE\_DESCRIPTION', 'VARCHAR2', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('ORDER', 'SHIPPING', 'VARCHAR2', 'PURCHASES\_TBL', null, null, null, 'ORDERS', 'SHIPPING', 'VARCHAR2', null, 'ORD\_TBL', 'SHIPPING', 'VARCHAR2', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('ORDER', 'SALES\_TAX', 'FLOAT', 'PURCHASES\_TBL', null, null, null, 'ORDERS', 'SALES\_TAX', 'FLOAT', null, 'ORD\_TBL', 'SALES\_TAX', 'FLOAT', null);

INSERT INTO METADATA\_TBL (CNL\_TABLE\_NAME, CNL\_COLUMN\_NAME, CNL\_DATA\_TYPE, DB1\_TABLE\_NAME, DB1\_COLUMN\_NAME, DB1\_DATA\_TYPE, DB1\_FUNCTION, DB2\_TABLE\_NAME, DB2\_COLUMN\_NAME, DB2\_DATA\_TYPE, DB2\_FUNCTION, DB3\_TABLE\_NAME, DB3\_COLUMN\_NAME, DB3\_DATA\_TYPE, DB3\_FUNCTION) VALUES ('ORDER', 'STATUS', 'VARCHAR2', 'PURCHASES\_TBL', null, null, null, 'ORDERS', 'ORDER\_STATUS', 'VARCHAR2', null, 'ORD\_TBL', 'ORDER\_STATUS', 'VARCHAR2', null);

SELECT \* FROM METADATA\_TBL;

**/\* TABLE CREATION AND INSERTION FOR DB1 \*/**

**/\* DROP TABLE STATEMENTS\*/**

DROP TABLE BOOKS\_TBL CASCADE CONSTRAINTS;

DROP TABLE MUSIC\_CD\_TBL;

DROP TABLE PURCHASES\_TBL;

DROP TABLE CATEGORY\_TAB;

DROP TABLE GENRE\_TAB;

DROP TABLE PRODUCT\_TAB;

DROP TABLE CUSTOMERS\_TBL;

DROP SEQUENCE MUSIC\_CD\_TBL\_ID\_SEQ;

DROP SEQUENCE BOOKS\_TBL\_ID\_SEQ;

/\* CREATE TABLE STATEMENTS FOR DB1\*/

CREATE TABLE CATEGORY\_TAB (CATEGORY\_ID NUMBER, CATEGORY VARCHAR2(255), CONSTRAINT CATEGORY\_ID\_pk PRIMARY KEY (CATEGORY\_ID));

CREATE TABLE GENRE\_TAB (GENRE\_ID NUMBER, GENRE VARCHAR2(255), CONSTRAINT GENRE\_pk PRIMARY KEY (GENRE\_ID)); -- (CLASSICAL, JAZZ, POP, HIP HOP, ROCK, RAP, FOLK, COUNTRY)

CREATE TABLE PRODUCT\_TAB (PRODUCT\_ID NUMBER, PRODUCT\_TYPE VARCHAR2(255), TITLE VARCHAR2(255), STOCK\_COUNT NUMBER, CONSTRAINT PRODUCT\_ID\_pk PRIMARY KEY (PRODUCT\_ID), CONSTRAINT check\_PRODUCT\_TYPE CHECK (PRODUCT\_TYPE IN ('BOOK', 'MUSIC\_CD')), CONSTRAINT TITLE\_CNST UNIQUE (TITLE));

CREATE TABLE BOOKS\_TBL (ID number, ISBN NUMBER, PRODUCT\_ID NUMBER, TITLE VARCHAR2(255), AUTHORS VARCHAR2(255), PRICE NUMBER, CATEGORY\_ID NUMBER, DESCRIPTION VARCHAR2(2000),

CONSTRAINT ID\_BK\_pk PRIMARY KEY (ID),

CONSTRAINT fk\_CATEGORY\_ID

FOREIGN KEY (CATEGORY\_ID)

REFERENCES CATEGORY\_TAB(CATEGORY\_ID),

CONSTRAINT fk\_PRODUCT\_BK\_ID

FOREIGN KEY (PRODUCT\_ID)

REFERENCES PRODUCT\_TAB(PRODUCT\_ID),

CONSTRAINT fk\_PRODUCT\_book\_Title

FOREIGN KEY (TITLE)

REFERENCES PRODUCT\_TAB(TITLE),

CONSTRAINT ISBN\_UC UNIQUE (ISBN));

CREATE TABLE MUSIC\_CD\_TBL (ID NUMBER, PRODUCT\_ID NUMBER, TITLE VARCHAR2(255), ARTISTS VARCHAR2(255), RECORD\_COMPANY VARCHAR2(255), PRICE NUMBER, GENRE\_ID NUMBER, DESCRIPTION VARCHAR2(2000),

CONSTRAINT ID\_MSC\_pk PRIMARY KEY (ID), CONSTRAINT fk\_GENRE\_ID

FOREIGN KEY (GENRE\_ID)

REFERENCES GENRE\_TAB(GENRE\_ID),

CONSTRAINT fk\_PRODUCT\_MSC\_ID

FOREIGN KEY (PRODUCT\_ID)

REFERENCES PRODUCT\_TAB(PRODUCT\_ID),

CONSTRAINT fk\_PRODUCT\_MSC\_Title

FOREIGN KEY (TITLE)

REFERENCES PRODUCT\_TAB(TITLE));

CREATE SEQUENCE BOOKS\_TBL\_ID\_SEQ

START WITH 1

INCREMENT BY 1

NOCACHE

NOCYCLE;

CREATE SEQUENCE MUSIC\_CD\_TBL\_ID\_SEQ

START WITH 1

INCREMENT BY 1

NOCACHE

NOCYCLE;

CREATE TABLE CUSTOMERS\_TBL (CUST\_ID NUMBER, CUST\_NAME VARCHAR2(255), ADDRESS VARCHAR2(2000), PH\_NO NUMBER(10), CONSTRAINT CUST\_ID\_pk PRIMARY KEY (CUST\_ID));

CREATE TABLE PURCHASES\_TBL (PURCHASE\_ID NUMBER, PRODUCT\_ID NUMBER, CUST\_ID NUMBER, QUANTITY NUMBER, AMOUNT NUMBER, SALE\_DATE DATE, CONSTRAINT PURCHASE\_ID\_pk PRIMARY KEY (PURCHASE\_ID), CONSTRAINT fk\_PRODUCT

FOREIGN KEY (PRODUCT\_ID)

REFERENCES PRODUCT\_TAB(PRODUCT\_ID),

CONSTRAINT fk\_CUST

FOREIGN KEY (CUST\_ID)

REFERENCES CUSTOMERS\_TBL(CUST\_ID));

/\*Insert into CATEGORY\_TAB \*/

INSERT INTO CATEGORY\_TAB (CATEGORY\_ID, CATEGORY) VALUES (1, 'MEMOIR');

INSERT INTO CATEGORY\_TAB (CATEGORY\_ID, CATEGORY) VALUES (2, 'DRAMA');

INSERT INTO CATEGORY\_TAB (CATEGORY\_ID, CATEGORY) VALUES (3, 'FANTASY');

INSERT INTO CATEGORY\_TAB (CATEGORY\_ID, CATEGORY) VALUES (4, 'MYSTERY');

INSERT INTO CATEGORY\_TAB (CATEGORY\_ID, CATEGORY) VALUES (5, 'HUMOUR');

INSERT INTO CATEGORY\_TAB (CATEGORY\_ID, CATEGORY) VALUES (6, 'FICTION');

INSERT INTO CATEGORY\_TAB (CATEGORY\_ID, CATEGORY) VALUES (7, 'POETRY');

INSERT INTO CATEGORY\_TAB (CATEGORY\_ID, CATEGORY) VALUES (8, 'HORRROR');

INSERT INTO CATEGORY\_TAB (CATEGORY\_ID, CATEGORY) VALUES (9, 'ROMANCE');

INSERT INTO CATEGORY\_TAB (CATEGORY\_ID, CATEGORY) VALUES (10, 'LITERATURE');

SELECT \* FROM CATEGORY\_TAB;

/\*Insert into GENRE\_TAB \*/

INSERT INTO GENRE\_TAB (GENRE\_ID, GENRE) VALUES (1, 'CLASSICAL');

INSERT INTO GENRE\_TAB (GENRE\_ID, GENRE) VALUES (2, 'JAZZ');

INSERT INTO GENRE\_TAB (GENRE\_ID, GENRE) VALUES (3, 'POP');

INSERT INTO GENRE\_TAB (GENRE\_ID, GENRE) VALUES (4, 'HIP HOP');

INSERT INTO GENRE\_TAB (GENRE\_ID, GENRE) VALUES (5, 'ROCK');

INSERT INTO GENRE\_TAB (GENRE\_ID, GENRE) VALUES (6, 'RAP');

INSERT INTO GENRE\_TAB (GENRE\_ID, GENRE) VALUES (7, 'FOLK');

INSERT INTO GENRE\_TAB (GENRE\_ID, GENRE) VALUES (8, 'COUNTRY');

INSERT INTO GENRE\_TAB (GENRE\_ID, GENRE) VALUES (9, 'BLUES');

INSERT INTO GENRE\_TAB (GENRE\_ID, GENRE) VALUES (10, 'ELECTRO');

SELECT \* FROM GENRE\_TAB;

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (1, 'BOOK', 'FIFTY SHADES OF GREY', 40);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (2, 'BOOK', 'HARRY POTTER AND THE SORCERER¿S STONE', 20);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (3, 'BOOK', 'DIVIDE ME BY ZERO', 8);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (4, 'BOOK', 'A MIND UNRAVELED', 4);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (5, 'BOOK', 'UNBREAKABLE', 0);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (6, 'BOOK', 'THE DINOSOR ARTIST', 0);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (7, 'MUSIC\_CD', 'DAS WOHLTEMPERIERTE KLAVIER. VOL. I', 3);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (8, 'MUSIC\_CD', 'DYNAMO ROCK', 23);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (9, 'MUSIC\_CD', 'TRUDY LOVE', 8);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (10, 'MUSIC\_CD', 'LAST FORVER', 0);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (11, 'MUSIC\_CD', 'REAL DEED', 0);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (12, 'MUSIC\_CD', 'KIND OF SHY', 11);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (13, 'MUSIC\_CD', 'ROMAN DEAL', 40);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (14, 'BOOK', 'WISDOM FROM TRUTH', 4);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (15, 'BOOK', 'ROSENBAUN TIMES', 1);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (16, 'BOOK', 'ANNA KARENINA', 14);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (17, 'BOOK', 'ULYSSES', 2);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (18, 'MUSIC\_CD', 'GIANT STEPS', 0);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (19, 'MUSIC\_CD', 'BIRTH OF COOL', 8);

INSERT INTO PRODUCT\_TAB (PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT) VALUES (20, 'MUSIC\_CD', 'SAXAPHONE COLOSSUS', 0);

SELECT \* FROM PRODUCT\_TAB;

/\*Insert into Books \*/

INSERT INTO BOOKS\_TBL (ID, ISBN, PRODUCT\_ID, TITLE, AUTHORS, PRICE, CATEGORY\_ID, DESCRIPTION) VALUES (1, 9783844509434, 1, 'FIFTY SHADES OF GREY', 'E. L. JAMES', 20, 9, 'THIS IS A ROMANTIC FICTION');

INSERT INTO BOOKS\_TBL (ID, ISBN, PRODUCT\_ID, TITLE, AUTHORS, PRICE, CATEGORY\_ID, DESCRIPTION) VALUES (2, 9788700631625, 2, 'HARRY POTTER AND THE SORCERER¿S STONE', 'J.K.ROWLING', 50, 6, 'THIS IS A FICTION STORY');

INSERT INTO BOOKS\_TBL (ID, ISBN, PRODUCT\_ID, TITLE, AUTHORS, PRICE, CATEGORY\_ID, DESCRIPTION) VALUES (3, 9783748427374, 3, 'DIVIDE ME BY ZERO', 'LARA VAPNYAR', 45, 6, 'FICTIOUS DRAMA');

INSERT INTO BOOKS\_TBL (ID, ISBN, PRODUCT\_ID, TITLE, AUTHORS, PRICE, CATEGORY\_ID, DESCRIPTION) VALUES (4, 9783564758490, 4, 'A MIND UNRAVELED', 'KURT EICHENWALD', 25, 1, 'A MEMOIR BY KURT');

INSERT INTO BOOKS\_TBL (ID, ISBN, PRODUCT\_ID, TITLE, AUTHORS, PRICE, CATEGORY\_ID, DESCRIPTION) VALUES (5, 9785367474823, 5, 'UNBREAKABLE', 'RICHARD ASKWITH', 38, 1, 'A MEMOIR BY RICHARD');

INSERT INTO BOOKS\_TBL (ID, ISBN, PRODUCT\_ID, TITLE, AUTHORS, PRICE, CATEGORY\_ID, DESCRIPTION) VALUES (6, 9783563763728, 6, 'THE DINOSOR ARTIST', 'PAIGE WILLIAMS', 44, 4, 'MYSTERY DRAMA BY PAIGE WILLIAMS');

INSERT INTO BOOKS\_TBL (ID, ISBN, PRODUCT\_ID, TITLE, AUTHORS, PRICE, CATEGORY\_ID, DESCRIPTION) VALUES (7, 9783844504423, 14, 'WISDOM FROM TRUTH', 'E. L. JAMES', 28, 9, 'THIS IS A ROMANTIC FICTION NOVEL');

INSERT INTO BOOKS\_TBL (ID, ISBN, PRODUCT\_ID, TITLE, AUTHORS, PRICE, CATEGORY\_ID, DESCRIPTION) VALUES (8, 9783844509456, 15, 'ROSENBAUN TIMES', 'PETER AVERY', 18, 4, 'THIS IS A MYSTERY DRAMA');

INSERT INTO BOOKS\_TBL (ID, ISBN, PRODUCT\_ID, TITLE, AUTHORS, PRICE, CATEGORY\_ID, DESCRIPTION) VALUES (9, 9786352632241, 16, 'ANNA KARENINA', 'LEO TOLSTOY', 16, 10, 'LITERARY NOVEL BY LEO TOLSTOY');

INSERT INTO BOOKS\_TBL (ID, ISBN, PRODUCT\_ID, TITLE, AUTHORS, PRICE, CATEGORY\_ID, DESCRIPTION) VALUES (10, 9786352632245, 17, 'ULYSSES', 'JAMES JOYCE', 14, 10, 'LITERATURE JOURNAL FROM 1922');

SELECT \* FROM BOOKS\_TBL;

/\*Insert into MUSIC\_CD\_TBL \*/

INSERT INTO MUSIC\_CD\_TBL (ID, PRODUCT\_ID, TITLE, ARTISTS, RECORD\_COMPANY, PRICE, GENRE\_ID, DESCRIPTION) VALUES (1, 7, 'DAS WOHLTEMPERIERTE KLAVIER. VOL. I', 'BACH, JOHANN SEBASTIAN', 'ECC MUSIC CDS', 8, 1, 'MUSIC CD FROM 1986 BY ESS MUSIC RECORDS');

INSERT INTO MUSIC\_CD\_TBL (ID, PRODUCT\_ID, TITLE, ARTISTS, RECORD\_COMPANY, PRICE, GENRE\_ID, DESCRIPTION) VALUES (2, 8, 'DYNAMO ROCK', 'SOLOMON SO, MARK MASON', 'TENURE MUSICALS', 21, 5, 'ROCK MUSIC BY AVERY TROOPS FROM 1988');

INSERT INTO MUSIC\_CD\_TBL (ID, PRODUCT\_ID, TITLE, ARTISTS, RECORD\_COMPANY, PRICE, GENRE\_ID, DESCRIPTION) VALUES (3, 9, 'TRUDY LOVE', 'ROGER FELLOW', 'MILESTONE MUSICALS', 32, 4, 'HIP HOP MUSIC FROM ROGER AKA. GOODMAN');

INSERT INTO MUSIC\_CD\_TBL (ID, PRODUCT\_ID, TITLE, ARTISTS, RECORD\_COMPANY, PRICE, GENRE\_ID, DESCRIPTION) VALUES (4, 10, 'LAST FORVER', 'PETER AVERY', 'SAMS ARTIST CLUB', 16, 3, 'POP SONGS FROM PETER AVERY');

INSERT INTO MUSIC\_CD\_TBL (ID, PRODUCT\_ID, TITLE, ARTISTS, RECORD\_COMPANY, PRICE, GENRE\_ID, DESCRIPTION) VALUES (5, 11, 'REAL DEED', 'SAM WORTHINGTON', 'RUNAWAY ARTIST', 22, 2, 'JAZZ SONGS FROM SAM WORTHINGTON');

INSERT INTO MUSIC\_CD\_TBL (ID, PRODUCT\_ID, TITLE, ARTISTS, RECORD\_COMPANY, PRICE, GENRE\_ID, DESCRIPTION) VALUES (6, 12, 'KIND OF SHY', 'TIMNOTHY CAULEY', 'HOME MEDIA ENT', 45, 6, 'RAP SONG ALBUM FROM HOME MEDIA');

INSERT INTO MUSIC\_CD\_TBL (ID, PRODUCT\_ID, TITLE, ARTISTS, RECORD\_COMPANY, PRICE, GENRE\_ID, DESCRIPTION) VALUES (7, 13, 'ROMAN DEAL', 'PETER AVERY', 'UNION CLUB MEDIA', 12, 4, 'HIP HOP BY AVERY TROOPS');

INSERT INTO MUSIC\_CD\_TBL (ID, PRODUCT\_ID, TITLE, ARTISTS, RECORD\_COMPANY, PRICE, GENRE\_ID, DESCRIPTION) VALUES (8, 18, 'GIANT STEPS', 'MARK RUFFALO', 'JIM BEAN ARTIST', 43, 3, 'POP SONGS FROM JIM BEAN STUDIOS');

INSERT INTO MUSIC\_CD\_TBL (ID, PRODUCT\_ID, TITLE, ARTISTS, RECORD\_COMPANY, PRICE, GENRE\_ID, DESCRIPTION) VALUES (9, 19, 'BIRTH OF COOL', 'MARK RUFFALO', 'ECC MUSIC CDS', 12, 3, 'POP SONGS FROM JIM BEAN STUDIOS');

INSERT INTO MUSIC\_CD\_TBL (ID, PRODUCT\_ID, TITLE, ARTISTS, RECORD\_COMPANY, PRICE, GENRE\_ID, DESCRIPTION) VALUES (10, 20, 'SAXAPHONE COLOSSUS', 'MARK RUFFALO', 'JIM BEAN ARTIST', 7, 2, 'JAZZ SONGS FROM JIM BEAN STUDIOS');

SELECT \* FROM MUSIC\_CD\_TBL;

/\*Insert into CUSTOMERS\_TBL \*/

INSERT INTO CUSTOMERS\_TBL (CUST\_ID, CUST\_NAME, ADDRESS, PH\_NO) VALUES (1, 'PRMELA SMITH', '5633 VANILLA DR, ORLANDO, FLORIDA 87553', 2554772822);

INSERT INTO CUSTOMERS\_TBL (CUST\_ID, CUST\_NAME, ADDRESS, PH\_NO) VALUES (2, 'LAURA SANDRE', '9876 KIRGILA DR, BALIMORE, MARYLAND 21117', 4103564778);

INSERT INTO CUSTOMERS\_TBL (CUST\_ID, CUST\_NAME, ADDRESS, PH\_NO) VALUES (3, 'HICKORY ROME', '3422 BALLARD DR, CHICAGO, ILLINOIS 87553', 8973564744);

INSERT INTO CUSTOMERS\_TBL (CUST\_ID, CUST\_NAME, ADDRESS, PH\_NO) VALUES (4, 'FELISHA MARY', '4522 RICHWOD DR, BALTIMORE, MARYLAND 21267', 4105637282);

INSERT INTO CUSTOMERS\_TBL (CUST\_ID, CUST\_NAME, ADDRESS, PH\_NO) VALUES (5, 'RAMOS CARLEN', '3566 FLORENC DR, BALTIMORE, MARYLAND 21225', 4103455674);

INSERT INTO CUSTOMERS\_TBL (CUST\_ID, CUST\_NAME, ADDRESS, PH\_NO) VALUES (6, 'MATT ROMAN', '1758 PLINLIMON STREET, OWINGS MILLS, MARYLAND 21204', 4103455674);

INSERT INTO CUSTOMERS\_TBL (CUST\_ID, CUST\_NAME, ADDRESS, PH\_NO) VALUES (7, 'VINAY PACKS', '4578 NITRO DR, CATONSVILLE, MARYLAND 21478', 4103455674);

INSERT INTO CUSTOMERS\_TBL (CUST\_ID, CUST\_NAME, ADDRESS, PH\_NO) VALUES (8, 'ELRICH THOMAS', '21 FELLS POINT RD, ELLICOTT CITY, MARYLAND 21425', 4103455674);

INSERT INTO CUSTOMERS\_TBL (CUST\_ID, CUST\_NAME, ADDRESS, PH\_NO) VALUES (9, 'PICKET ROY', '54 LOCKART DR, COLUMBIA, MARYLAND 21214', 4103455674);

INSERT INTO CUSTOMERS\_TBL (CUST\_ID, CUST\_NAME, ADDRESS, PH\_NO) VALUES (10, 'VINCE MAHOME', '8 VIRIGIA JANE DR, BALTIMORE, MARYLAND 21225', 4103455674);

SELECT \* FROM CUSTOMERS\_TBL;

/\*Insert into PURCHASES\_TBL \*/

INSERT INTO PURCHASES\_TBL (PURCHASE\_ID, PRODUCT\_ID, CUST\_ID, QUANTITY, AMOUNT, SALE\_DATE) VALUES (1, 2, 1, 4, 60, TIMESTAMP '2018-12-28 00:00:00');

INSERT INTO PURCHASES\_TBL (PURCHASE\_ID, PRODUCT\_ID, CUST\_ID, QUANTITY, AMOUNT, SALE\_DATE) VALUES (2, 2, 2, 1, 60, TIMESTAMP '2018-12-29 00:00:00');

INSERT INTO PURCHASES\_TBL (PURCHASE\_ID, PRODUCT\_ID, CUST\_ID, QUANTITY, AMOUNT, SALE\_DATE) VALUES (3, 2, 3, 2, 60, TIMESTAMP '2019-01-03 00:00:00');

INSERT INTO PURCHASES\_TBL (PURCHASE\_ID, PRODUCT\_ID, CUST\_ID, QUANTITY, AMOUNT, SALE\_DATE) VALUES (4, 2, 4, 4, 60, TIMESTAMP '2019-02-21 00:00:00');

INSERT INTO PURCHASES\_TBL (PURCHASE\_ID, PRODUCT\_ID, CUST\_ID, QUANTITY, AMOUNT, SALE\_DATE) VALUES (5, 2, 5, 4, 60, TIMESTAMP '2019-03-15 00:00:00');

INSERT INTO PURCHASES\_TBL (PURCHASE\_ID, PRODUCT\_ID, CUST\_ID, QUANTITY, AMOUNT, SALE\_DATE) VALUES (6, 7, 1, 2, 10, TIMESTAMP '2019-04-14 00:00:00');

INSERT INTO PURCHASES\_TBL (PURCHASE\_ID, PRODUCT\_ID, CUST\_ID, QUANTITY, AMOUNT, SALE\_DATE) VALUES (7, 7, 2, 1, 10, TIMESTAMP '2019-05-26 00:00:00');

INSERT INTO PURCHASES\_TBL (PURCHASE\_ID, PRODUCT\_ID, CUST\_ID, QUANTITY, AMOUNT, SALE\_DATE) VALUES (8, 8, 3, 3, 26, TIMESTAMP '2019-06-20 00:00:00');

INSERT INTO PURCHASES\_TBL (PURCHASE\_ID, PRODUCT\_ID, CUST\_ID, QUANTITY, AMOUNT, SALE\_DATE) VALUES (9, 5, 4, 8, 51, TIMESTAMP '2019-07-22 00:00:00');

INSERT INTO PURCHASES\_TBL (PURCHASE\_ID, PRODUCT\_ID, CUST\_ID, QUANTITY, AMOUNT, SALE\_DATE) VALUES (10, 3, 5, 1, 50, TIMESTAMP '2019-10-03 00:00:00');

SELECT \* FROM PURCHASES\_TBL;

**/\* CREATION AND INSERTION FOR DB2 \*/**

-- Table Names for DB2

/\*

PRODUCT

ORDERS

LINE\_ITEM

CUSTOMER

\*/

DROP TABLE CUSTOMER CASCADE CONSTRAINTS;

DROP TABLE PRODUCT CASCADE CONSTRAINTS;

DROP TABLE ORDERS CASCADE CONSTRAINTS;

DROP TABLE LINE\_ITEM CASCADE CONSTRAINTS;

create table customer(

customer\_id int,

customer\_name varchar(100),

address varchar(50),

email varchar(30),

phone int,

primary key(customer\_id)

);

create table product(

product\_id int,

product\_name varchar(100),

product\_type varchar(100),

product\_quantity int,

product\_price int,

primary key(product\_id)

);

create table Orders(

order\_id int,

order\_date date,

customer\_id int,

sales\_tax float,

shipping float,

order\_status varchar(100),

primary key(order\_id),

foreign key(customer\_id) references customer(customer\_id)

);

create table line\_item(

item\_id int,

order\_id int,

product\_id int,

item\_description varchar(100),

item\_quantity int,

price\_per\_unit float,

primary key(item\_id),

foreign key(order\_id) references Orders(order\_id),

foreign key(product\_id) references product(product\_id)

);

/\*Insert into CUSTOMER \*/

INSERT INTO CUSTOMER (CUSTOMER\_ID, CUSTOMER\_NAME, ADDRESS, EMAIL, PHONE) VALUES (1, 'Shweta', '101 Wheaton way,MD', 'shwetak1@umbc.edu', 9869259039);

INSERT INTO CUSTOMER (CUSTOMER\_ID, CUSTOMER\_NAME, ADDRESS, EMAIL, PHONE) VALUES (2, 'Raj', '111 ram way, PA', 'rani1@umbc.edu', 9869253839);

INSERT INTO CUSTOMER (CUSTOMER\_ID, CUSTOMER\_NAME, ADDRESS, EMAIL, PHONE) VALUES (3, 'Omki', '178 boston way, NY', 'Omki1@umbc.edu', 9869267039);

INSERT INTO CUSTOMER (CUSTOMER\_ID, CUSTOMER\_NAME, ADDRESS, EMAIL, PHONE) VALUES (4, 'Ninad', '189 Wheaton way, TX', 'ninad1@umbc.edu', 9865553039);

INSERT INTO CUSTOMER (CUSTOMER\_ID, CUSTOMER\_NAME, ADDRESS, EMAIL, PHONE) VALUES (5, 'Rutu', '199 righey way, MD', 'rutu1@umbc.edu', 9869299039);

INSERT INTO CUSTOMER (CUSTOMER\_ID, CUSTOMER\_NAME, ADDRESS, EMAIL, PHONE) VALUES (6, 'Alka', '156 tilak way, CA', 'alka@umbc.edu', 9869252239);

INSERT INTO CUSTOMER (CUSTOMER\_ID, CUSTOMER\_NAME, ADDRESS, EMAIL, PHONE) VALUES (7, 'Arun', '123 ellicott way, MD', 'shak1@umbc.edu', 9864453039);

INSERT INTO CUSTOMER (CUSTOMER\_ID, CUSTOMER\_NAME, ADDRESS, EMAIL, PHONE) VALUES (8, 'David', '167 charleston way, MD', 'etak1@umbc.edu', 6669253039);

INSERT INTO CUSTOMER (CUSTOMER\_ID, CUSTOMER\_NAME, ADDRESS, EMAIL, PHONE) VALUES (9, 'Sam', '190 chatham way, CA', 'gy67k1@umbc.edu', 9869288039);

INSERT INTO CUSTOMER (CUSTOMER\_ID, CUSTOMER\_NAME, ADDRESS, EMAIL, PHONE) VALUES (10, 'Rita', '123 cross way, TX', 'skjl991@umbc.edu', 9869200039);

select \* from customer;

/\*Insert into PURCHASES\_TBL \*/

INSERT INTO PRODUCT (PRODUCT\_ID, PRODUCT\_NAME, PRODUCT\_TYPE, PRODUCT\_QUANTITY, PRODUCT\_PRICE) VALUES (101, 'BLACK SKIRT', 'BLACK FLORAL SILK SKIRT', 4, 40);

INSERT INTO PRODUCT (PRODUCT\_ID, PRODUCT\_NAME, PRODUCT\_TYPE, PRODUCT\_QUANTITY, PRODUCT\_PRICE) VALUES (102, 'BLUE SKIRT', 'BLUE FLORAL SILK SKIRT', 2, 40);

INSERT INTO PRODUCT (PRODUCT\_ID, PRODUCT\_NAME, PRODUCT\_TYPE, PRODUCT\_QUANTITY, PRODUCT\_PRICE) VALUES (103, 'BLACK TOP', 'BLACK ANIMAL PRINT TOP', 1, 30);

INSERT INTO PRODUCT (PRODUCT\_ID, PRODUCT\_NAME, PRODUCT\_TYPE, PRODUCT\_QUANTITY, PRODUCT\_PRICE) VALUES (104, 'BLUE TOP', 'BLUE ANIMAL PRINT TOP', 3, 35);

INSERT INTO PRODUCT (PRODUCT\_ID, PRODUCT\_NAME, PRODUCT\_TYPE, PRODUCT\_QUANTITY, PRODUCT\_PRICE) VALUES (105, 'WHITE SCARF', 'WHITE SHIMMER SCARF', 10, 25);

INSERT INTO PRODUCT (PRODUCT\_ID, PRODUCT\_NAME, PRODUCT\_TYPE, PRODUCT\_QUANTITY, PRODUCT\_PRICE) VALUES (106, 'PINK SCARF', 'PINK SHIMMER SCARF', 7, 30);

INSERT INTO PRODUCT (PRODUCT\_ID, PRODUCT\_NAME, PRODUCT\_TYPE, PRODUCT\_QUANTITY, PRODUCT\_PRICE) VALUES (107, 'GREEN JEAN', 'GREEN H SILK JEANS', 8, 60);

INSERT INTO PRODUCT (PRODUCT\_ID, PRODUCT\_NAME, PRODUCT\_TYPE, PRODUCT\_QUANTITY, PRODUCT\_PRICE) VALUES (108, 'PERL SHIRT', 'PERL FORMAL SHIRT', 9, 33);

INSERT INTO PRODUCT (PRODUCT\_ID, PRODUCT\_NAME, PRODUCT\_TYPE, PRODUCT\_QUANTITY, PRODUCT\_PRICE) VALUES (109, 'SANDLE', 'BEDGE SANDLE', 3, 15);

INSERT INTO PRODUCT (PRODUCT\_ID, PRODUCT\_NAME, PRODUCT\_TYPE, PRODUCT\_QUANTITY, PRODUCT\_PRICE) VALUES (110, 'GLITTER NAIL PAINT', 'BLACK GLITTER NAIL PAINT', 20, 2);

select \* from product;

/\*Insert into ORDERS \*/

INSERT INTO ORDERS (ORDER\_ID, ORDER\_DATE, CUSTOMER\_ID, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (201, TIMESTAMP '2019-10-12 00:00:00', 1, 0.05, 5, 'Received');

INSERT INTO ORDERS (ORDER\_ID, ORDER\_DATE, CUSTOMER\_ID, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (202, TIMESTAMP '2019-10-12 00:00:00', 7, 0.05, 5, 'Shipped');

INSERT INTO ORDERS (ORDER\_ID, ORDER\_DATE, CUSTOMER\_ID, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (203, TIMESTAMP '2019-10-12 00:00:00', 8, 0.05, 5, 'In progress');

INSERT INTO ORDERS (ORDER\_ID, ORDER\_DATE, CUSTOMER\_ID, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (204, TIMESTAMP '2019-10-10 00:00:00', 6, 0.09, 9, 'In progress');

INSERT INTO ORDERS (ORDER\_ID, ORDER\_DATE, CUSTOMER\_ID, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (205, TIMESTAMP '2019-10-10 00:00:00', 9, 0.09, 9, 'In progress');

INSERT INTO ORDERS (ORDER\_ID, ORDER\_DATE, CUSTOMER\_ID, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (206, TIMESTAMP '2019-10-13 00:00:00', 2, 0.04, 4, 'Shipped');

INSERT INTO ORDERS (ORDER\_ID, ORDER\_DATE, CUSTOMER\_ID, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (207, TIMESTAMP '2019-10-13 00:00:00', 1, 0.05, 5, 'Shipped');

INSERT INTO ORDERS (ORDER\_ID, ORDER\_DATE, CUSTOMER\_ID, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (208, TIMESTAMP '2019-10-11 00:00:00', 10, 0.03, 4, 'Shipped');

INSERT INTO ORDERS (ORDER\_ID, ORDER\_DATE, CUSTOMER\_ID, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (209, TIMESTAMP '2019-10-10 00:00:00', 4, 0.03, 4, 'Received');

INSERT INTO ORDERS (ORDER\_ID, ORDER\_DATE, CUSTOMER\_ID, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (210, TIMESTAMP '2019-10-16 00:00:00', 3, 0.08, 10, 'Received');

select \* from orders;

/\*Insert into LINE\_ITEM \*/

INSERT INTO LINE\_ITEM (ITEM\_ID, ORDER\_ID, PRODUCT\_ID, ITEM\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (1, 201, 101, 'black floral silk skirt', 1, 40);

INSERT INTO LINE\_ITEM (ITEM\_ID, ORDER\_ID, PRODUCT\_ID, ITEM\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (2, 201, 102, 'blue floral silk skirt', 1, 40);

INSERT INTO LINE\_ITEM (ITEM\_ID, ORDER\_ID, PRODUCT\_ID, ITEM\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (3, 202, 103, 'black animal print top', 2, 30);

INSERT INTO LINE\_ITEM (ITEM\_ID, ORDER\_ID, PRODUCT\_ID, ITEM\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (4, 203, 104, 'blue animal print top', 1, 35);

INSERT INTO LINE\_ITEM (ITEM\_ID, ORDER\_ID, PRODUCT\_ID, ITEM\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (5, 204, 105, 'white shimmer scarf', 2, 25);

INSERT INTO LINE\_ITEM (ITEM\_ID, ORDER\_ID, PRODUCT\_ID, ITEM\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (6, 205, 106, 'pink shimmer scarf', 2, 30);

INSERT INTO LINE\_ITEM (ITEM\_ID, ORDER\_ID, PRODUCT\_ID, ITEM\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (7, 206, 107, 'green H silk jeans', 1, 60);

INSERT INTO LINE\_ITEM (ITEM\_ID, ORDER\_ID, PRODUCT\_ID, ITEM\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (8, 207, 108, 'Perl formal shirt', 1, 33);

INSERT INTO LINE\_ITEM (ITEM\_ID, ORDER\_ID, PRODUCT\_ID, ITEM\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (9, 208, 109, 'bedge sandle', 3, 15);

INSERT INTO LINE\_ITEM (ITEM\_ID, ORDER\_ID, PRODUCT\_ID, ITEM\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (10, 209, 110, 'black glitter nail paint', 1, 2);

INSERT INTO LINE\_ITEM (ITEM\_ID, ORDER\_ID, PRODUCT\_ID, ITEM\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (11, 210, 101, 'black floral silk skirt', 1, 40);

INSERT INTO LINE\_ITEM (ITEM\_ID, ORDER\_ID, PRODUCT\_ID, ITEM\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (12, 210, 102, 'blue floral silk skirt', 1, 40);

INSERT INTO LINE\_ITEM (ITEM\_ID, ORDER\_ID, PRODUCT\_ID, ITEM\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (13, 210, 103, 'black animal print top', 1, 30);

select \* from line\_item;

/\* CREATION AND INSERTION FOR DB3 \*/

drop table SALES cascade constraints;

drop table ORd\_TBL cascade constraints;

drop table PRD cascade constraints;

drop table CUST cascade constraints;

create table CUST(

CUST\_ID number,

CUST\_NAME varchar2(100),

ADDR varchar2(50),

PH\_NUMBER NUMBER,

primary key(CUST\_ID)

);

create table PRD(

PRD\_ID number,

PRD\_TYPE varchar2(100),

PRD\_NAME varchar2(100),

PRD\_QUANTITY number,

primary key(PRD\_ID)

);

create table Ord\_tbl(

ORDER\_ID number,

cust\_id int,

ORDER\_DATE date,

sales\_tax float,

shipping float,

order\_status varchar2(100),

primary key(order\_id)

);

create table sales(

sale\_id number,

order\_id number,

PRD\_ID number,

sale\_description varchar2(100),

item\_quantity number,

price\_per\_unit number,

primary key(sale\_id),

foreign key(order\_id) references Ord\_tbl(order\_id),

foreign key(PRD\_ID) references PRD(PRD\_ID )

);

/\*Insert into CUST \*/

INSERT INTO CUST (CUST\_ID, CUST\_NAME, ADDR, PH\_NUMBER) VALUES (11, 'Shweta', '1012 Wheaton way,MD', 9869259029);

INSERT INTO CUST (CUST\_ID, CUST\_NAME, ADDR, PH\_NUMBER) VALUES (10, 'Raj', '1131 ram way, PA', 9869253829);

INSERT INTO CUST (CUST\_ID, CUST\_NAME, ADDR, PH\_NUMBER) VALUES (33, 'OmkiK', '1748 boston way, NY', 9869262039);

INSERT INTO CUST (CUST\_ID, CUST\_NAME, ADDR, PH\_NUMBER) VALUES (44, 'NinadK', '1489 Wheaton way, TX', 9865253039);

INSERT INTO CUST (CUST\_ID, CUST\_NAME, ADDR, PH\_NUMBER) VALUES (55, 'RutuK', '1949 righey way, MD', 9869292039);

INSERT INTO CUST (CUST\_ID, CUST\_NAME, ADDR, PH\_NUMBER) VALUES (66, 'AlkaK', '1546 tilak way, CA', 9869252229);

INSERT INTO CUST (CUST\_ID, CUST\_NAME, ADDR, PH\_NUMBER) VALUES (77, 'ArunK', '1243 ellicott way, MD', 9864423039);

INSERT INTO CUST (CUST\_ID, CUST\_NAME, ADDR, PH\_NUMBER) VALUES (88, 'DavidK', '1467 charleston way, MD', 6629253039);

INSERT INTO CUST (CUST\_ID, CUST\_NAME, ADDR, PH\_NUMBER) VALUES (99, 'SamK', '1904 chatham way, CA', 9869282039);

INSERT INTO CUST (CUST\_ID, CUST\_NAME, ADDR, PH\_NUMBER) VALUES (190, 'RitaK', '1323 cross way, TX', 9869202039);

select \* from cust;

/\*Insert into PRD \*/

INSERT INTO PRD (PRD\_ID, PRD\_TYPE, PRD\_NAME, PRD\_QUANTITY) VALUES (111, 'Jeans skirt', 'black floral silk skirt', 4);

INSERT INTO PRD (PRD\_ID, PRD\_TYPE, PRD\_NAME, PRD\_QUANTITY) VALUES (112, 'Denim skirt', 'blue floral silk skirt', 2);

INSERT INTO PRD (PRD\_ID, PRD\_TYPE, PRD\_NAME, PRD\_QUANTITY) VALUES (113, 'Silk top', 'black animal print top', 1);

INSERT INTO PRD (PRD\_ID, PRD\_TYPE, PRD\_NAME, PRD\_QUANTITY) VALUES (114, 'Cotton top', 'blue animal print top', 3);

INSERT INTO PRD (PRD\_ID, PRD\_TYPE, PRD\_NAME, PRD\_QUANTITY) VALUES (115, 'White scarf', 'white shimmer scarf', 10);

INSERT INTO PRD (PRD\_ID, PRD\_TYPE, PRD\_NAME, PRD\_QUANTITY) VALUES (116, 'Pink scarf', 'pink shimmer scarf', 7);

INSERT INTO PRD (PRD\_ID, PRD\_TYPE, PRD\_NAME, PRD\_QUANTITY) VALUES (117, 'Green jean', 'green H silk jeans', 8);

INSERT INTO PRD (PRD\_ID, PRD\_TYPE, PRD\_NAME, PRD\_QUANTITY) VALUES (118, 'Perl shirt', 'Perl formal shirt', 9);

INSERT INTO PRD (PRD\_ID, PRD\_TYPE, PRD\_NAME, PRD\_QUANTITY) VALUES (119, 'Sandle', 'bedge sandle', 3);

INSERT INTO PRD (PRD\_ID, PRD\_TYPE, PRD\_NAME, PRD\_QUANTITY) VALUES (120, 'Glitter Nail paint', 'black glitter nail paint', 20);

select \* from prd;

/\*Insert into ORD\_TBL \*/

INSERT INTO ORD\_TBL (ORDER\_ID, CUST\_ID, ORDER\_DATE, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (221, 22, TIMESTAMP '2019-10-12 00:00:00', 0.05, 5, 'Received');

INSERT INTO ORD\_TBL (ORDER\_ID, CUST\_ID, ORDER\_DATE, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (222, 33, TIMESTAMP '2019-10-12 00:00:00', 0.05, 5, 'Shipped');

INSERT INTO ORD\_TBL (ORDER\_ID, CUST\_ID, ORDER\_DATE, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (223, 44, TIMESTAMP '2019-10-12 00:00:00', 0.05, 5, 'In progress');

INSERT INTO ORD\_TBL (ORDER\_ID, CUST\_ID, ORDER\_DATE, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (224, 55, TIMESTAMP '2019-10-10 00:00:00', 0.09, 9, 'In progress');

INSERT INTO ORD\_TBL (ORDER\_ID, CUST\_ID, ORDER\_DATE, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (225, 44, TIMESTAMP '2019-10-10 00:00:00', 0.09, 9, 'In progress');

INSERT INTO ORD\_TBL (ORDER\_ID, CUST\_ID, ORDER\_DATE, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (226, 66, TIMESTAMP '2019-10-13 00:00:00', 0.04, 4, 'Shipped');

INSERT INTO ORD\_TBL (ORDER\_ID, CUST\_ID, ORDER\_DATE, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (227, 77, TIMESTAMP '2019-10-13 00:00:00', 0.05, 5, 'Shipped');

INSERT INTO ORD\_TBL (ORDER\_ID, CUST\_ID, ORDER\_DATE, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (228, 11, TIMESTAMP '2019-10-11 00:00:00', 0.03, 4, 'Shipped');

INSERT INTO ORD\_TBL (ORDER\_ID, CUST\_ID, ORDER\_DATE, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (229, 22, TIMESTAMP '2019-10-10 00:00:00', 0.03, 4, 'Received');

INSERT INTO ORD\_TBL (ORDER\_ID, CUST\_ID, ORDER\_DATE, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (220, 33, TIMESTAMP '2019-10-16 00:00:00', 0.08, 10, 'Received');

INSERT INTO ORD\_TBL (ORDER\_ID, CUST\_ID, ORDER\_DATE, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (230, 10, TIMESTAMP '2019-10-12 00:00:00', 0.02, 6, 'Shipped');

INSERT INTO ORD\_TBL (ORDER\_ID, CUST\_ID, ORDER\_DATE, SALES\_TAX, SHIPPING, ORDER\_STATUS) VALUES (231, 10, TIMESTAMP '2019-10-14 00:00:00', 0.03, 7, 'Shipped');

select \* from ord\_tbl;

/\*Insert into SALES \*/

INSERT INTO SALES (SALE\_ID, ORDER\_ID, PRD\_ID, SALE\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (911, 221, 111, 'black floral silk skirt', 1, 40);

INSERT INTO SALES (SALE\_ID, ORDER\_ID, PRD\_ID, SALE\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (921, 221, 112, 'blue floral silk skirt', 1, 40);

INSERT INTO SALES (SALE\_ID, ORDER\_ID, PRD\_ID, SALE\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (931, 222, 113, 'black animal print top', 2, 30);

INSERT INTO SALES (SALE\_ID, ORDER\_ID, PRD\_ID, SALE\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (941, 223, 114, 'blue animal print top', 1, 35);

INSERT INTO SALES (SALE\_ID, ORDER\_ID, PRD\_ID, SALE\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (951, 224, 115, 'white shimmer scarf', 2, 25);

INSERT INTO SALES (SALE\_ID, ORDER\_ID, PRD\_ID, SALE\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (961, 225, 116, 'pink shimmer scarf', 2, 30);

INSERT INTO SALES (SALE\_ID, ORDER\_ID, PRD\_ID, SALE\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (971, 226, 117, 'green H silk jeans', 1, 60);

INSERT INTO SALES (SALE\_ID, ORDER\_ID, PRD\_ID, SALE\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (981, 227, 118, 'Perl formal shirt', 1, 33);

INSERT INTO SALES (SALE\_ID, ORDER\_ID, PRD\_ID, SALE\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (991, 228, 119, 'bedge sandle', 3, 15);

INSERT INTO SALES (SALE\_ID, ORDER\_ID, PRD\_ID, SALE\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (999, 220, 111, 'black floral silk skirt', 1, 40);

INSERT INTO SALES (SALE\_ID, ORDER\_ID, PRD\_ID, SALE\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (912, 220, 112, 'blue floral silk skirt', 1, 40);

INSERT INTO SALES (SALE\_ID, ORDER\_ID, PRD\_ID, SALE\_DESCRIPTION, ITEM\_QUANTITY, PRICE\_PER\_UNIT) VALUES (913, 220, 113, 'black animal print top', 1, 30);

select \* from sales;

**/\* PROCEDURES AND FUNCTIONS \*/**

**/\*\*\*\*\*\*\*\*\*\*\* Table Type \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

create or replace type tab\_typ\_varchar as table of varchar2(50);

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\* Function to split the global query\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

create or replace function regex\_substr (str in varchar2) return tab\_typ\_varchar as

ret tab\_typ\_varchar := tab\_typ\_varchar();

i number := 1;

value\_store varchar2(50);

begin

loop

value\_store := regexp\_substr(str, '([^[:blank:]]+)', 1, i);

exit when value\_store is null;

ret.extend;

ret(i) := value\_store;

i := i+1;

end loop;

return ret;

end regex\_substr;

**/\*\*\*\*\*\*\*\*\*\*\* Stored Procedure which takes the global query and temporary table name as input strings and generate sub queries & temporary tables that contain the results for each submitted subquery to each local database & gives final output\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

set serveroutput on;

show errors;

CREATE OR REPLACE PROCEDURE AUTO\_CODE\_GENR (in\_str IN VARCHAR, tab\_nm in varchar)

AS

l\_row\_val number;

l\_column\_value varchar2(255);

l\_string\_build varchar2(3600);

l\_string\_build\_trim varchar2(3600);

l\_cnt\_clm number;

l\_cnt\_tbl number;

l\_clm\_nm varchar2(255);

l\_tbl\_nm varchar2(255);

l\_sql\_stm varchar2(3600);

l\_db\_val number;

l\_sql\_stm\_tbl varchar2(255);

l\_string\_final varchar2(3600);

l\_string\_prv varchar2(3600);

l\_str\_vld number;

sql1 varchar2(3600);

begin

select count(\*) into l\_db\_val

from all\_tab\_columns

where table\_name='METADATA\_TBL'

and column\_name like '%DB\_\_COLUMN\_NAME%';

for j in 1..l\_db\_val

LOOP

for i in (

select rownum, UPPER(column\_value) AS column\_value

from table(regex\_substr(

(with str as (

select regexp\_substr(in\_str,'[^,]+', 1, level) as str\_y from dual

connect by regexp\_substr(in\_str, '[^,]+', 1, level) is not null

)

select listagg(str\_y, ' ') within group (order by rownum) as str\_d from str

)

))

)

loop

if trim(i.column\_value) in ('SELECT', 'FROM', 'WHERE', '=', '<>', '!=', '<=', '>=', 'AND', 'OR', 'NOT', 'NOT LIKE', 'LIKE', 'IN', 'NOT IN')

then

if trim(i.column\_value) IN ('FROM', '=', '<>', '!=', '<=', '>=', 'LIKE', 'IN')

then

SELECT SUBSTR(l\_string\_build, 0, LENGTH(l\_string\_build) - 1) into l\_string\_build\_trim FROM dual;

l\_string\_build := l\_string\_build\_trim ||' '|| i.column\_value ||' ';

else

l\_string\_build := l\_string\_build ||' '|| i.column\_value ||' ';

end if;

ELSIF i.column\_value like ('''%')

then

l\_string\_build := l\_string\_build || i.column\_value;

ELSE

SELECT count(\*) into l\_cnt\_clm FROM METADATA\_TBL WHERE upper(cnl\_column\_name) = i.column\_value;

SELECT count(\*) into l\_cnt\_tbl FROM METADATA\_TBL WHERE upper(cnl\_table\_name) = TRIM(i.column\_value);

--dbms\_output.put\_line ('Table\_count: ' || l\_cnt\_tbl);

if l\_cnt\_clm = 1

then

l\_sql\_stm := 'select nvl (' || 'db'||j ||'\_column\_name, ''999'') from METADATA\_TBL WHERE upper(cnl\_column\_name) = ' ||''''|| i.column\_value || '''';

-- dbms\_output.put\_line (l\_sql\_stm);

execute immediate l\_sql\_stm into l\_clm\_nm;

l\_string\_build := l\_string\_build || ' ' || l\_clm\_nm || ',';

end if;

if l\_cnt\_tbl >= 1

then

l\_sql\_stm\_tbl := 'select distinct (nvl (' || 'db'||j ||'\_table\_name, ''999'')) from METADATA\_TBL WHERE upper(cnl\_table\_name) = ' ||''''|| i.column\_value || '''';

-- dbms\_output.put\_line (l\_sql\_stm\_tbl);

execute immediate l\_sql\_stm\_tbl into l\_tbl\_nm;

-- dbms\_output.put\_line (l\_sql\_stm\_tbl);

l\_string\_build := l\_string\_build || ' ' || l\_tbl\_nm;

end if;

if l\_cnt\_clm = 0 and l\_cnt\_tbl = 0

then

l\_string\_build := l\_string\_build ||' '|| i.column\_value;

-- DBMS\_OUTPUT.PUT\_LINE ( 'CLM\_VAL: ' || i.column\_value);

end if;

end if;

end loop;

l\_string\_final := l\_string\_build;

l\_str\_vld := INSTR(l\_string\_final, '999', 1, 2);

if j = 1 then

dbms\_output.put\_line ('Global String: ' || CHR(10) || in\_str || ';');

end if;

if l\_str\_vld >= 1 then l\_string\_final := null;

else

sql1 := 'create table ' || tab\_nm ||j || ' as ' || l\_string\_final;

dbms\_output.put(CHR(10));

dbms\_output.put\_line ('Subquery Statement DB' ||j|| ': ' || CHR(10) || l\_string\_final||';');

dbms\_output.put(CHR(10));

dbms\_output.put\_line ('Create Table Statement DB' ||j|| ': ' || CHR(10) ||sql1||';');

dbms\_output.put(CHR(10));

--execute immediate sql1;

if j = 1 then

l\_string\_prv := l\_string\_final;

elsif j = 2 then

l\_string\_prv := l\_string\_prv || ' Union ' || CHR(10) || l\_string\_final;

else

l\_string\_prv := l\_string\_prv || ' Union ' || CHR(10) || l\_string\_final;

end if;

end if;

l\_string\_build := null;

end loop;

dbms\_output.put(CHR(10));

dbms\_output.put\_line ('Final Query to all DBs: ' || CHR(10) || l\_string\_prv||';');

dbms\_output.put(CHR(10));

end;

**/\* SCENARIOS \*/**

**--1. Search for all books that have been authored by a specific author of your choice --**

begin

AUTO\_CODE\_GENR ('select BK\_id, isbn, product\_id, title, authors from books where authors = ''E. L. James''', 'book\_aut');

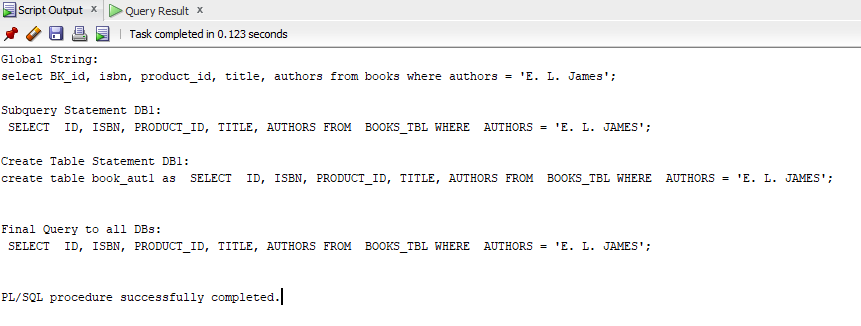
end;

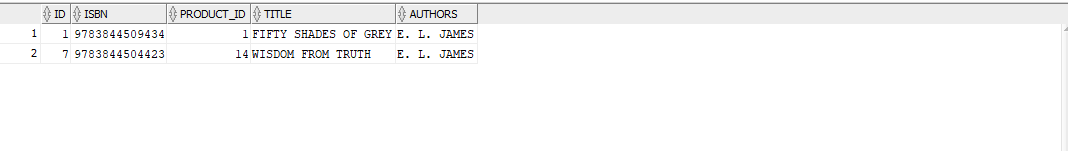
-- Table creation script output

create table book\_aut1 as SELECT ID, ISBN, PRODUCT\_ID, TITLE, AUTHORS FROM BOOKS\_TBL WHERE AUTHORS = 'E. L. JAMES';

-- select from table

select \* from book\_aut1;





**-- 2. Search for all CDs that feature a specific artist**

begin

AUTO\_CODE\_GENR ('select music\_id, msc\_title, artists, record\_company, msc\_description from music\_cd where artists = ''MARK RUFFALO''', 'msc\_artist');

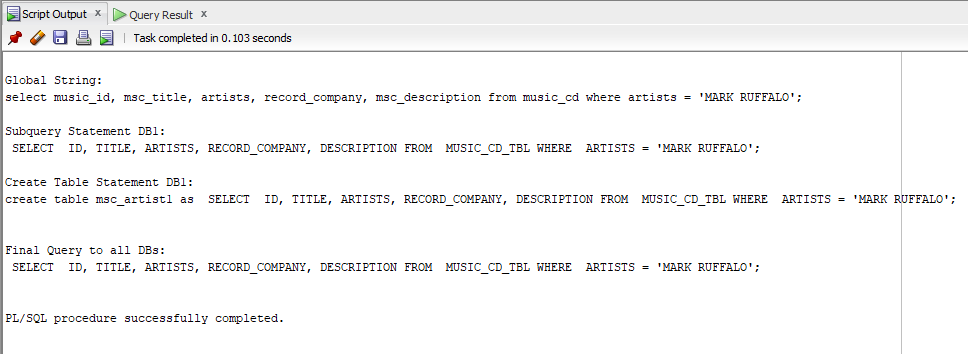
end;

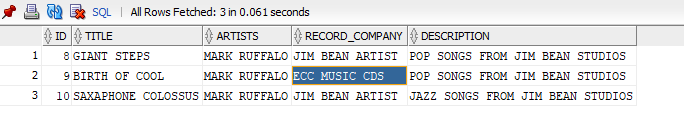
-- Table creation script output

create table msc\_artist1 as SELECT ID, TITLE, ARTISTS, RECORD\_COMPANY, DESCRIPTION FROM MUSIC\_CD\_TBL WHERE ARTISTS = 'MARK RUFFALO';

-- select from table

select \* from msc\_artist1;





**--3. Display a few columns from each order in the local databases**

begin

AUTO\_CODE\_GENR ('select PURCHASE\_ID, CUST\_ID, SALE\_DATE, SHIPPING, SALES\_TAX, STATUS FROM ORDER', 'order\_DB');

end;

SELECT ORDER\_ID, CUSTOMER\_ID, ORDER\_DATE, SHIPPING, SALES\_TAX, ORDER\_STATUS FROM ORDERS;

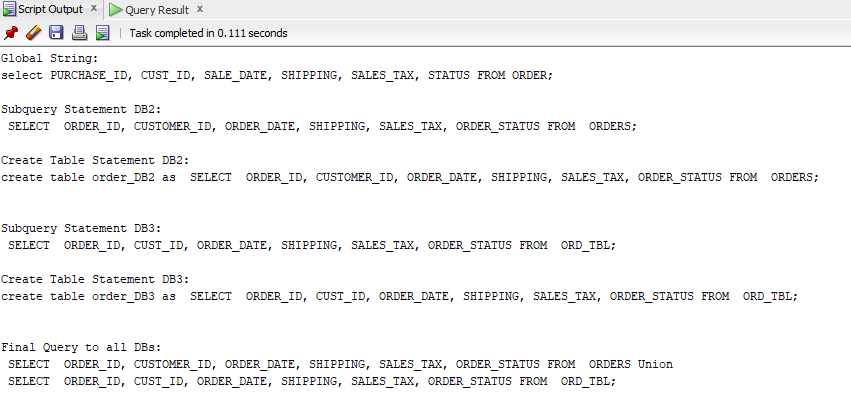
create table order\_dsp2 as SELECT ORDER\_ID, CUSTOMER\_ID, ORDER\_DATE, SHIPPING, SALES\_TAX, ORDER\_STATUS FROM ORDERS

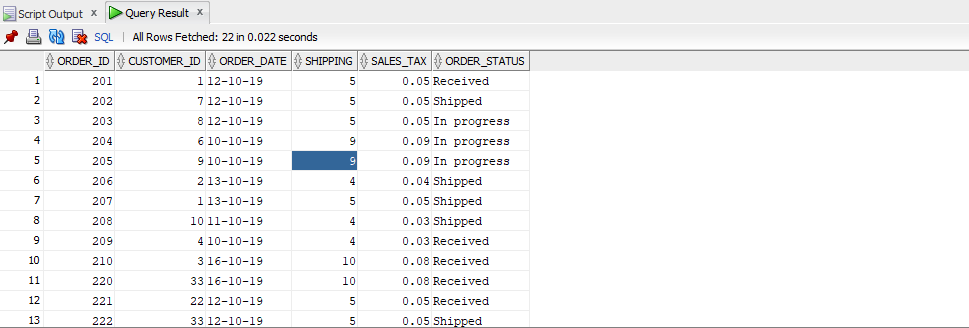
SELECT ORDER\_ID, CUST\_ID, ORDER\_DATE, SHIPPING, SALES\_TAX, ORDER\_STATUS FROM ORD\_TBL;

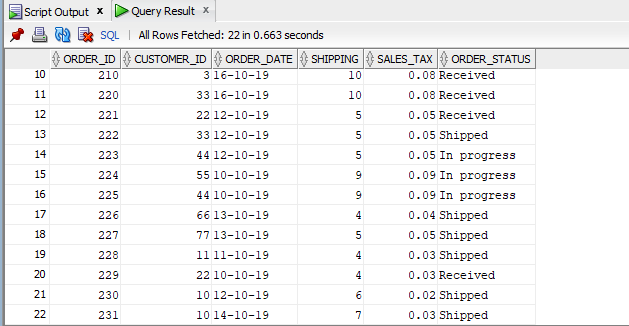
create table order\_dsp3 as SELECT ORDER\_ID, CUST\_ID, ORDER\_DATE, SHIPPING, SALES\_TAX, ORDER\_STATUS FROM ORD\_TBL;

SELECT \* FROM ORDER\_DSP2;

SELECT \* FROM ORDER\_DSP3;







**-- 4. Search for each product with at least quantity N (you choose what N is)**

begin

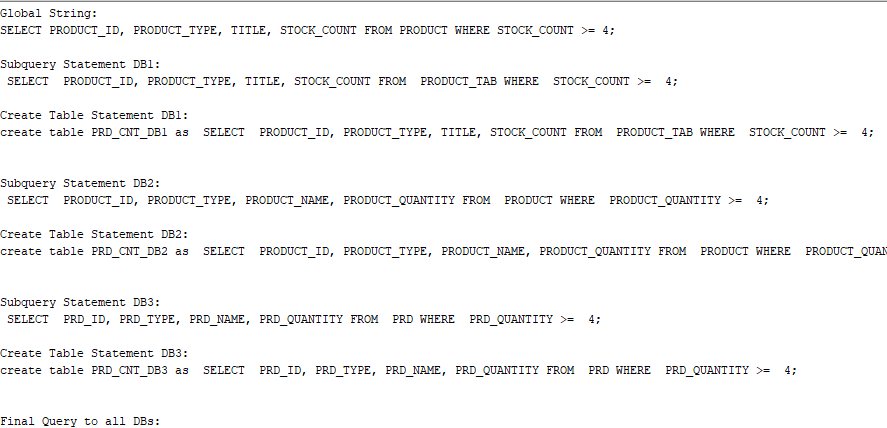
AUTO\_CODE\_GENR ('SELECT PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT FROM PRODUCT WHERE STOCK\_COUNT >= 4', 'PRD\_CNT\_DB');

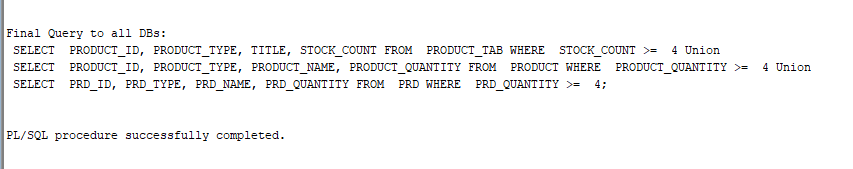
END;

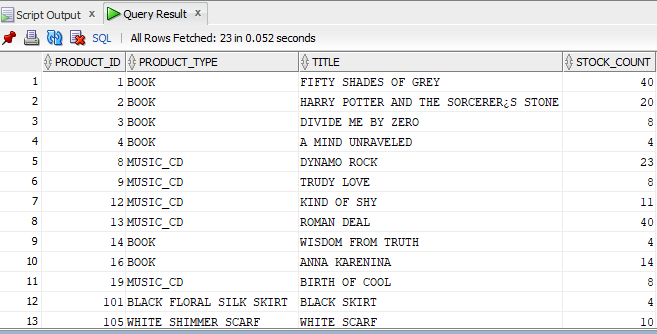
SELECT PRODUCT\_ID, PRODUCT\_TYPE, TITLE, STOCK\_COUNT FROM PRODUCT\_TAB WHERE STOCK\_COUNT >= 4;

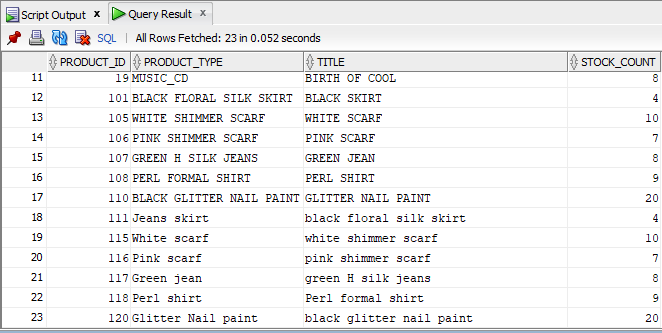
SELECT PRODUCT\_ID, PRODUCT\_TYPE, PRODUCT\_NAME, PRODUCT\_QUANTITY FROM PRODUCT WHERE PRODUCT\_QUANTITY >= 4;

SELECT PRD\_ID, PRD\_TYPE, PRD\_NAME, PRD\_QUANTITY FROM PRD WHERE PRD\_QUANTITY >= 4;









**-- 5. Display all orders of a particular customer**

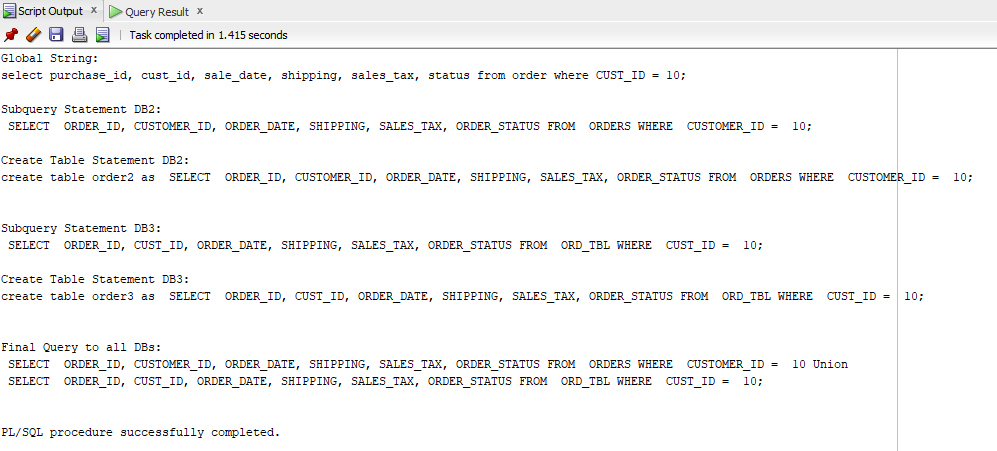
begin

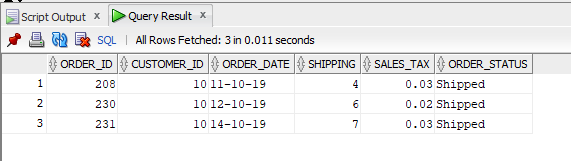
AUTO\_CODE\_GENR ('select purchase\_id, cust\_id, sale\_date, shipping, sales\_tax, status from order where CUST\_ID = 10', 'order');

end;

SELECT ORDER\_ID, CUSTOMER\_ID, ORDER\_DATE, SHIPPING, SALES\_TAX, ORDER\_STATUS FROM ORDERS WHERE CUSTOMER\_ID = 10;

SELECT ORDER\_ID, CUST\_ID, ORDER\_DATE, SHIPPING, SALES\_TAX, ORDER\_STATUS FROM ORD\_TBL WHERE CUST\_ID = 10;





**--6. Different Scenarios**

**----Scenario 6.1: Display all information about a particular book title.**

begin

AUTO\_CODE\_GENR ('select BK\_id, isbn, product\_id, title, authors from books where title = ''A MIND UNRAVELED''', 'book\_tit');

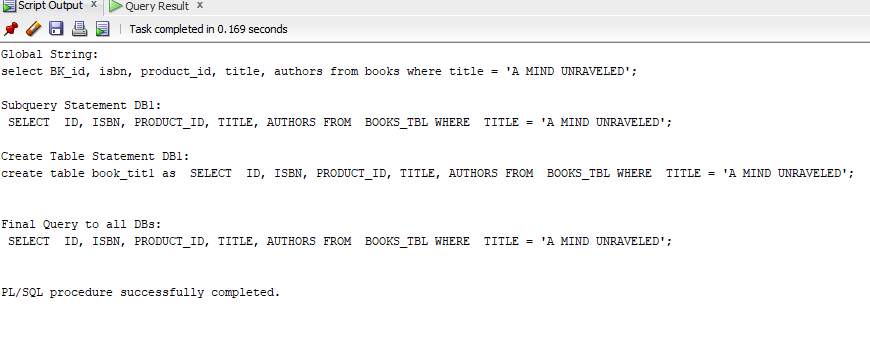
end;

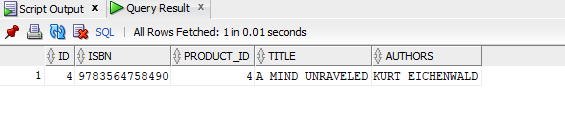
-- Table creation script output

create table book\_tit as SELECT ID, ISBN, PRODUCT\_ID, TITLE, AUTHORS FROM BOOKS\_TBL WHERE title = 'A MIND UNRAVELED';

-- select from table

select \* from book\_tit;





**--Scenario 6.2: Search for all CD’s for a particular record company.**

begin

AUTO\_CODE\_GENR ('select music\_id, msc\_title, artists, record\_company, msc\_description from music\_cd where record\_company = ''JIM BEAN ARTIST''', 'msc\_company');

end;

-- Table creation script output

create table msc\_company as SELECT ID, TITLE, ARTISTS, RECORD\_COMPANY, DESCRIPTION FROM MUSIC\_CD\_TBL WHERE record\_company = 'JIM BEAN ARTIST';

-- select from table

select \* from msc\_company;

