CREATE TYPE Name1 AS OBJECT(

fname varchar(20),

lname varchar(20)

)final

CREATE TYPE phone\_array AS VARRAY(4) OF varchar(15);

CREATE TABLE Author1 (

author\_id VARCHAR2(20) PRIMARY KEY,

name1 Name1,

phone\_no phone\_array

);

INSERT into Author1 VALUES('A1', Name1('John','Cena'), phone\_array('0123456789'));

INSERT into Author1 VALUES('A2', Name1('Ron','Doe'), phone\_array('0123456789'));

INSERT into Author1 VALUES('A3', Name1('abc','cde'), phone\_array('9876543210'));

INSERT into Author1 VALUES('A4', Name1('aum','cde'), phone\_array('4567283010'));

DELETE FROM Author1;

SELECT \* FROM Author1;

CREATE TYPE Publisher1 AS OBJECT(

pub\_id varchar(20),

pub\_name varchar(20),

branch varchar(20)

)final

CREATE TYPE author\_id\_array AS VARRAY(30) OF VARCHAR(20);

create type keyword\_set is varray(10) of varchar(10);

CREATE TABLE Book1(

ISBN INTEGER PRIMARY KEY,

title varchar(30),

author\_id author\_id\_array,

category varchar(10),

publisher Publisher1,

keyword keyword\_set,

price NUMBER(10,2)

);

INSERT INTO Book1 VALUES (123456, 'The Great Book', author\_id\_array('A1', 'A3'), 'Fiction', Publisher1('P1','abc','UK'), keyword\_set('Adventure', 'Fantasy', 'Epic'), 30.00 );

INSERT INTO Book1 VALUES (423156, 'The Great Love Story', author\_id\_array('A2', 'A3'), 'Romance', Publisher1('P2','Tata MaGraw Hill','UK'), keyword\_set('Adventure', 'Fantasy', 'Epic'), 25.00 );

INSERT INTO Book1 VALUES (745689, 'The ', author\_id\_array('A1'), 'Fiction', Publisher1('P1','abc','US'), keyword\_set('Adventure', 'Horror', 'Epic'), 40.00 );

INSERT INTO Book1 VALUES (124658, 'The hero ', author\_id\_array('A2', 'A4'), 'Action', Publisher1('P2','Tata MaGraw Hill','LONDON'), keyword\_set('Adventure', 'Horror', 'Epic'), 50.00 );

DELETE FROM Book1;

SELECT \* FROM Book1;

CREATE TABLE Customer1(

customer\_id varchar(10) PRIMARY KEY,

name1 Name1,

phone keyword\_set

);

INSERT INTO Customer1 VALUES('C1',Name1('Prathamesh','Bille'),keyword\_set('2456123'));

INSERT INTO Customer1 VALUES('C2',Name1('Pratham','Bille'),keyword\_set('5426157'));

INSERT INTO Customer1 VALUES('C3',Name1('Prath','Bille'),keyword\_set('3456125'));

INSERT INTO Customer1 VALUES('C4',Name1('Pra','Bil'),keyword\_set('3456125'));

SELECT \* FROM Customer1;

CREATE TABLE Book\_Sale(

sale\_id varchar(10) PRIMARY KEY,

customer\_id varchar(10),

ISBN INTEGER,

FOREIGN KEY (customer\_id) REFERENCES Customer1 (customer\_id),

FOREIGN KEY (ISBN) REFERENCES Book1 (ISBN)

);

INSERT INTO Book\_Sale VALUES('S1','C1', 123456);

INSERT INTO Book\_Sale VALUES('S2','C2', 423156);

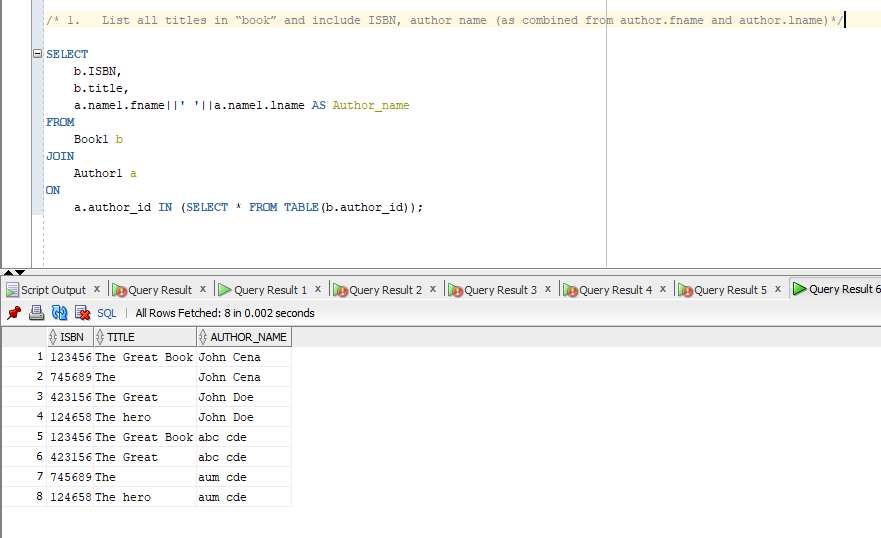
INSERT INTO Book\_Sale VALUES('S3','C3', 745689);

INSERT INTO Book\_Sale VALUES('S4','C4', 124658);

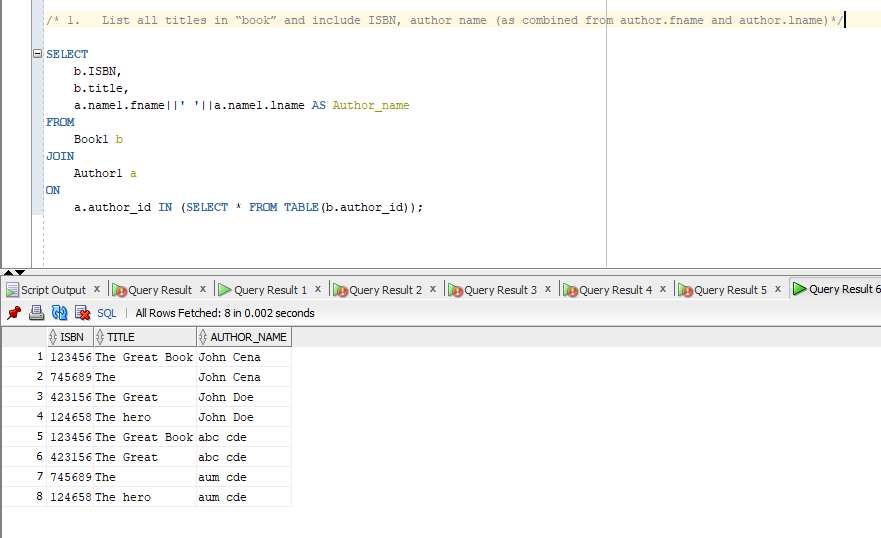
DELETE FROM Book\_Sale;

SELECT \* FROM Book\_Sale;

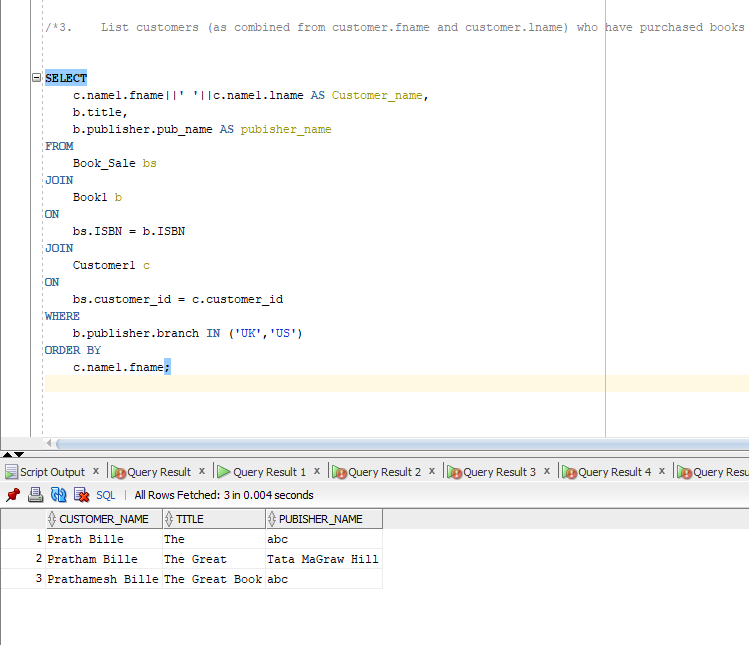
1. List all titles in “book” and include ISBN, author name (as combined from author.fname and author.lname).



2.List all customers who have purchased books published with ‘Tata MaGraw Hill’.



3.List customers (as combined from customer.fname and customer.lname) who have purchased books published in the UK or the US, as well as the title of the book they purchased and the name of its publisher and order by last name of customer.



4.List the different (distinct) categories and how many books belong to each category, order alphabetically by category.

A screenshot of a computer

Description automatically generated

5.List the number of books sold that have been written by each author and group by author’s first name.

