SQL Data Retrieval and Modification Exercises (Using Microsoft Access SQL)

3.52 Write and run the SQL statements necessary to create the tables and their referential integrity constraints.

CREATE TABLE CUSTOMER (

CustomerNumber Int NOT NULL,

CustomerLastName Char (25) NOT NULL,

CustomerFirstName Char (25) NOT NULL,

Phone Char (12) NOT NULL,

CONSTRAINT CUSTOMER\_PK PRIMARY KEY (CustomerNumber)

);

CREATE TABLE COURSE (

CourseNumber Int NOT NULL,

Course Char (35) NOT NULL,

CourseDate Date NOT NULL,

Fee Currency NOT NULL,

CONSTRAINT COURSE\_PK PRIMARY KEY (CourseNumber)

);

CREATE TABLE ENROLLMENT (

CustomerNumber Int NOT NULL,

CourseNumber Int NOT NULL,

AmountPaid Currency NOT NULL,

CONSTRAINT ENROLL\_CUST\_FK FOREIGN KEY(CustomerNumber)  
 REFERENCES CUSTOMER(CustomerNumber),

CONSTRAINT ENROLL\_COUR\_FK FOREIGN KEY(CourseNumber)   
 REFERENCES COURSE(CourseNumber)

);

3.53 Populate the tables with the data in Figure 1-12.

INSERT INTO CUSTOMER VALUES (1, ‘Johnson’, ‘Ariel’, ‘206-567-1234’);

INSERT INTO CUSTOMER VALUES (2, ‘Green’, ‘Robin’, ‘425-678-8765’);

INSERT INTO CUSTOMER VALUES (3, ‘Jackson’, ‘Charles’, ‘360-789-3456’);

INSERT INTO CUSTOMER VALUES (4, ‘Pearson’, ‘Jeffery’, ‘206-567-2345’);

INSERT INTO CUSTOMER VALUES (5, ‘Sears’, ‘Miguel’, ‘360-789-4567’);

INSERT INTO CUSTOMER VALUES (6, ‘Kyle’, ‘Leah’, ‘425-678-7654’);

INSERT INTO CUSTOMER VALUES (7, ‘Myers’, ‘Lynda’ ‘360-789-5678’);

INSERT INTO COURSE VALUES (1, ‘Adv Pastels’, ‘10/1/2017’, 500.00);

INSERT INTO COURSE VALUES (2, ‘Beg Oils’, ‘9/15/2017’, 350.00);

INSERT INTO COURSE VALUES (3, ‘Int Pastels’, ‘3/15/2017’, 350.00);

INSERT INTO COURSE VALUES (4, ‘Beg Oils’, ‘10/15/2017’, 350.00);

INSERT INTO COURSE VALUES (5, ‘Adv Pastels’, ‘11/15/2017’, 500.00);

INSERT INTO ENROLLMENT VALUES (1, 1, 250.00);

INSERT INTO ENROLLMENT VALUES (1, 3, 350.00);

INSERT INTO ENROLLMENT VALUES (2, 2, 350.00);

INSERT INTO ENROLLMENT VALUES (3, 1, 500.00);

INSERT INTO ENROLLMENT VALUES (4, 1, 500.00);

INSERT INTO ENROLLMENT VALUES (5, 2, 350.00);

INSERT INTO ENROLLMENT VALUES (6, 5, 250.00);

INSERT INTO ENROLLMENT VALUES (7, 4, 0.00);

3.54 Write and run an SQL query to list all occurrences of Adv Pastels in the COURSE table. Include all associated data for each occurrence of the class.

SELECT \*

FROM COURSE

WHERE Course = ‘Adv Pastels’;

3.55 Write and run an SQL query to list all students and courses they are registered for. Include, in this order, CustomerNumber, CustomerLastName, CustomerFirstName, Phone, CourseNumber, and AmountPaid.

SELECT CUSTOMER.CustomerNumber, CustomerLastName, CustomerFirstName, Phone, ENROLLMENT.CourseNumber, AmountPaid

FROM CUSTOMER, ENROLLMENT

WHERE CUSTOMER.CustomerNumber = ENROLLMENT.CustomerNumber;