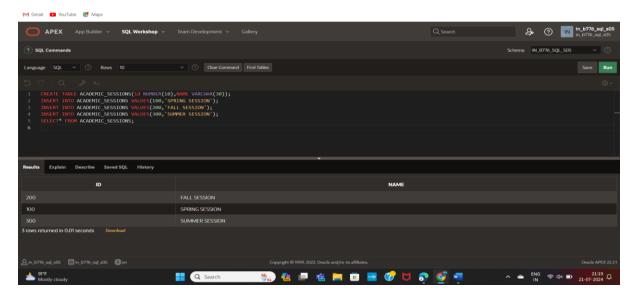Database Foundations 6-4 :

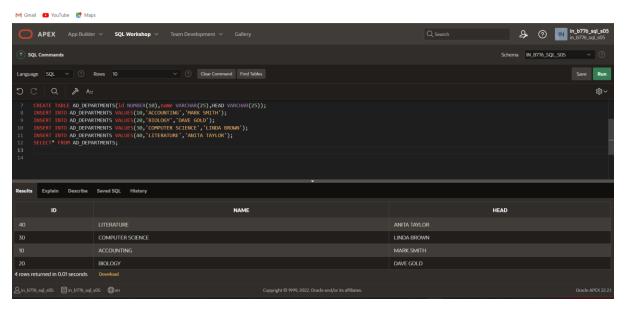Defining Data Manipulation Practices

Exercise 1: Inserting Rows in Tables Overview You will insert rows into the tables created for the Academic Database. Assumptions The tables have been created for the Academic Database (based on Practice 6-3).

1. Insert rows into the tables created for the Academic Database based on the following tables:
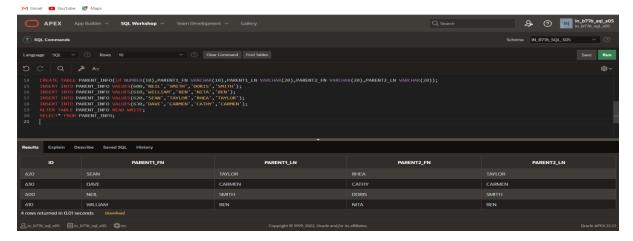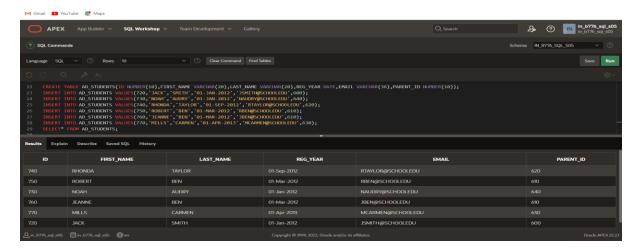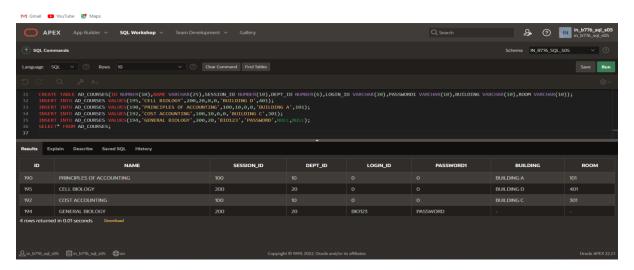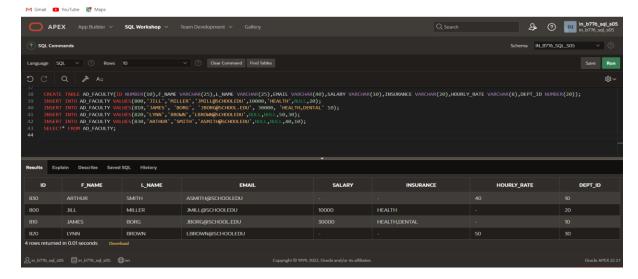
A:

B:

C:

APEX   App Builder ∨   SQL Workshop ∨   Team Development ∨   Gallery   Q Search   IN in_b776_sql_s05
                                                                                                in_b776_sql_s05

⬆ SQL Commands   Schema IN_B776_SQL_S05 ∨

Language SQL ∨ Rows 10 ∨   Clear Command   Find Tables   Save   Run

```
14  CREATE TABLE PARENT_INFO(id NUMBER(10),PARENT1_FN VARCHAR(10),PARENT1_LN VARCHAR(20),PARENT2_FN VARCHAR(20),PARENT2_LN VARCHAR(20));
15  INSERT INTO PARENT_INFO VALUES(600,'NEIL','SMITH','DORIS','SMITH');
16  INSERT INTO PARENT_INFO VALUES(610,'WILLIAM','BEN','NITA','BEN');
17  INSERT INTO PARENT_INFO VALUES(620,'SEAN','TAYLOR','RHEA','TAYLOR');
18  INSERT INTO PARENT_INFO VALUES(630,'DAVE','CARMEN','CATHY','CARMEN');
19  ALTER TABLE PARENT_INFO READ WRITE;
20  SELECT* FROM PARENT_INFO;
21  |
```

Results   Explain   Describe   Saved SQL   History

ID	PARENT1_FN	PARENT1_LN	PARENT2_FN	PARENT2_LN
620	SEAN	TAYLOR	RHEA	TAYLOR
630	DAVE	CARMEN	CATHY	CARMEN
600	NEIL	SMITH	DORIS	SMITH
610	WILLIAM	BEN	NITA	BEN

4 rows returned in 0.01 seconds   Download

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D:

APEX   App Builder ∨   SQL Workshop ∨   Team Development ∨   Gallery   Q Search   IN in_b776_sql_s05
                                                                                                in_b776_sql_s05

⬆ SQL Commands   Schema IN_B776_SQL_S05 ∨

Language SQL ∨ Rows 10 ∨   Clear Command   Find Tables   Save   Run

```
22  CREATE TABLE AD_STUDENTS(ID NUMBER(10),FIRST_NAME VARCHAR(20),LAST_NAME VARCHAR(20),REG_YEAR DATE,EMAIL VARCHAR(36),PARENT_ID NUMBER(10));
23  INSERT INTO AD_STUDENTS VALUES(720,'JACK','SMITH','01-JAN-2012','JSMITH@SCHOOLEDU',600);
24  INSERT INTO AD_STUDENTS VALUES(730,'NOAH','AUDRY','01-JAN-2012','NAUDRY@SCHOOLEDU',640);
25  INSERT INTO AD_STUDENTS VALUES(740,'RHONDA','TAYLOR','01-SEP-2012','RTAYLOR@SCHOOLEDU',620);
26  INSERT INTO AD_STUDENTS VALUES(750,'ROBERT','BEN','01-MAR-2012','RBEN@SCHOOLEDU',610);
27  INSERT INTO AD_STUDENTS VALUES(760,'JEANNE','BEN','01-MAR-2012','JBEN@SCHOOLEDU',610);
28  INSERT INTO AD_STUDENTS VALUES(770,'MILLS','CARMEN','01-APR-2013','MCARMEN@SCHOOLEDU',630);
29  SELECT* FROM AD_STUDENTS;
```

Results   Explain   Describe   Saved SQL   History

ID	FIRST_NAME	LAST_NAME	REG_YEAR	EMAIL	PARENT_ID
740	RHONDA	TAYLOR	01-Sep-2012	RTAYLOR@SCHOOLEDU	620
750	ROBERT	BEN	01-Mar-2012	RBEN@SCHOOLEDU	610
730	NOAH	AUDRY	01-Jan-2012	NAUDRY@SCHOOLEDU	640
760	JEANNE	BEN	01-Mar-2012	JBEN@SCHOOLEDU	610
770	MILLS	CARMEN	01-Apr-2013	MCARMEN@SCHOOLEDU	630
720	JACK	SMITH	01-Jan-2012	JSMITH@SCHOOLEDU	600

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E:

APEX   App Builder ∨   SQL Workshop ∨   Team Development ∨   Gallery   Q Search   IN in_b776_sql_s05
                                                                                                in_b776_sql_s05

⬆ SQL Commands   Schema IN_B776_SQL_S05 ∨

Language SQL ∨ Rows 10 ∨   Clear Command   Find Tables   Save   Run

```
31  CREATE TABLE AD_COURSES(ID NUMBER(10),NAME VARCHAR(25),SESSION_ID NUMBER(10),DEPT_ID NUMBER(6),LOGIN_ID VARCHAR(20),PASSWORD1 VARCHAR(10),BUILDING VARCHAR(10),ROOM VARCHAR(10));
32  INSERT INTO AD_COURSES VALUES(195,'CELL BIOLOGY',200,20,0,0,'BUILDING D',401);
33  INSERT INTO AD_COURSES VALUES(190,'PRINCIPLES OF ACCOUNTING',100,10,0,0,'BUILDING A',101);
34  INSERT INTO AD_COURSES VALUES(192,'COST ACCOUNTING',100,10,0,0,'BUILDING C',301);
35  INSERT INTO AD_COURSES VALUES(194,'GENERAL BIOLOGY',200,20,'BIO123','PASSWORD',NULL,NULL);
36  SELECT* FROM AD_COURSES;
37
```

Results   Explain   Describe   Saved SQL   History

ID	NAME	SESSION_ID	DEPT_ID	LOGIN_ID	PASSWORD1	BUILDING	ROOM
190	PRINCIPLES OF ACCOUNTING	100	10	0	0	BUILDING A	101
195	CELL BIOLOGY	200	20	0	0	BUILDING D	401
192	COST ACCOUNTING	100	10	0	0	BUILDING C	301
194	GENERAL BIOLOGY	200	20	BIO123	PASSWORD	-	-

4 rows returned in 0.01 seconds   Download

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F:

APEX   App Builder ⌄   SQL Workshop ⌄   Team Development ⌄   Gallery   🔍 Search   IN in_b776_sql_s05

⬆ SQL Commands   Schema IN_B776_SQL_S05 ⌄

Language SQL ⌄   Rows 10   Clear Command   Find Tables   Save   Run

```
37
38  CREATE TABLE AD_FACULTY(ID NUMBER(10),F_NAME VARCHAR(25),L_NAME VARCHAR(25),EMAIL VARCHAR(40),SALARY VARCHAR(10),INSURANCE VARCHAR(20),HOURLY_RATE VARCHAR(8),DEPT_ID NUMBER(20));
39  INSERT INTO AD_FACULTY VALUES(800,'JILL','MILLER','JMILL@SCHOOLEDU',10000,'HEALTH',NULL,20);
40  INSERT INTO AD_FACULTY VALUES(810,'JAMES', 'BORG', 'JBORG@SCHOOL.EDU', 30000, 'HEALTH,DENTAL' 10);
41  INSERT INTO AD_FACULTY VALUES(820,'LYNN','BROWN','LBROWN@SCHOOLEDU',NULL,NULL,50,30);
42  INSERT INTO AD_FACULTY VALUES(830,'ARTHUR','SMITH','ASMITH@SCHOOLEDU',NULL,NULL,40,10);
43  SELECT* FROM AD_FACULTY;
44
```

Results   Explain   Describe   Saved SQL   History

ID	F_NAME	L_NAME	EMAIL	SALARY	INSURANCE	HOURLY_RATE	DEPT_ID
830	ARTHUR	SMITH	ASMITH@SCHOOLEDU	-	-	40	10
800	JILL	MILLER	JMILL@SCHOOLEDU	10000	HEALTH	-	20
810	JAMES	BORG	JBORG@SCHOOL.EDU	30000	HEALTH,DENTAL	-	10
820	LYNN	BROWN	LBROWN@SCHOOLEDU	-	-	50	30

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G:

APEX   App Builder ⌄   SQL Workshop ⌄   Team Development ⌄   Gallery   🔍 Search   IN in_b776_sql_s05

⬆ SQL Commands   Schema IN_B776_SQL_S05 ⌄

Language SQL ⌄   Rows 10   Clear Command   Find Tables   Save   Run

```
45  CREATE TABLE AD_EXAM_TYPES(TYPE1 VARCHAR(5),NAME VARCHAR(50),DESCRIPTION1 VARCHAR(50));
46  INSERT INTO AD_EXAM_TYPES VALUES('MCE','MULTIPLE CHOICE EXAMS','CHOOSE MORE THAN ONE ANS');
47  INSERT INTO AD_EXAM_TYPES VALUES('TF','TRUE AND FALSE EXAMS','CHOOSE EITHER TRUE OR FALSE');
48  INSERT INTO AD_EXAM_TYPES VALUES('ESS','ESSAY EXAMS','WRITE PARAGRAPHS');
49  INSERT INTO AD_EXAM_TYPES VALUES('SA','SHORT ANSWER EXAMS','WRITE SHORT ANSWERS');
50  SELECT* FROM AD_EXAM_TYPES;
51
```

Results   Explain   Describe   Saved SQL   History

TYPE1	NAME	DESCRIPTION1
ESS	ESSAY EXAMS	WRITE PARAGRAPHS
MCE	MULTIPLE CHOICE EXAMS	CHOOSE MORE THAN ONE ANS
SA	SHORT ANSWER EXAMS	WRITE SHORT ANSWERS
TF	TRUE AND FALSE EXAMS	CHOOSE EITHER TRUE OR FALSE

4 rows returned in 0.01 seconds   Download

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H:

APEX   App Builder ⌄   SQL Workshop ⌄   Team Development ⌄   Gallery   🔍 Search   IN in_b776_sql_s05

⬆ SQL Commands   Schema IN_B776_SQL_S05 ⌄

Language SQL ⌄   Rows 10   Clear Command   Find Tables   Save   Run

```
52  CREATE TABLE AD_EXAMS(ID NUMBER(19),START_DATE DATE,EXAM_TYPE VARCHAR(10),COURSE_ID NUMBER(20));
53  INSERT INTO AD_EXAMS VALUES(500,'12-SEP-2013','MCE',190);
54  INSERT INTO AD_EXAMS VALUES(510,'15-SEP-2013','SA',191);
55  INSERT INTO AD_EXAMS VALUES(520,'18-SEP-2013','FIB',192);
56  INSERT INTO AD_EXAMS VALUES(530,'21-MAR-2013','ESS',193);
57  SELECT* FROM AD_EXAMS;
58
```

Results   Explain   Describe   Saved SQL   History

ID	START_DATE	EXAM_TYPE	COURSE_ID
500	12-Sep-2013	MCE	190
520	18-Sep-2013	FIB	192
530	21-Mar-2013	ESS	193
510	15-Sep-2013	SA	191

4 rows returned in 0.01 seconds   Download

in_b776_sql_s05   in_b776_sql_s05   en   Copyright © 1999, 2022, Oracle and/or its affiliates.   Oracle APEX 22.21
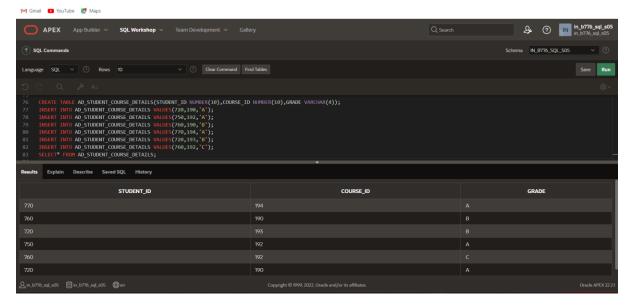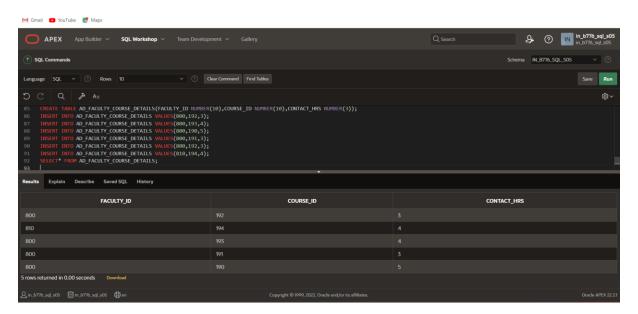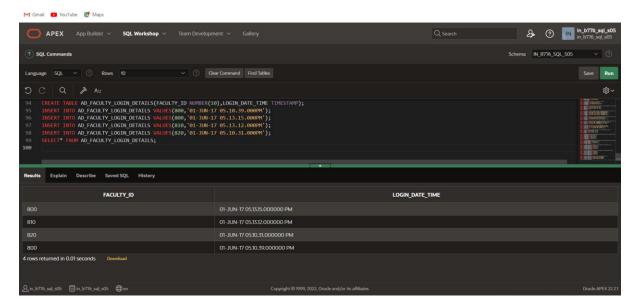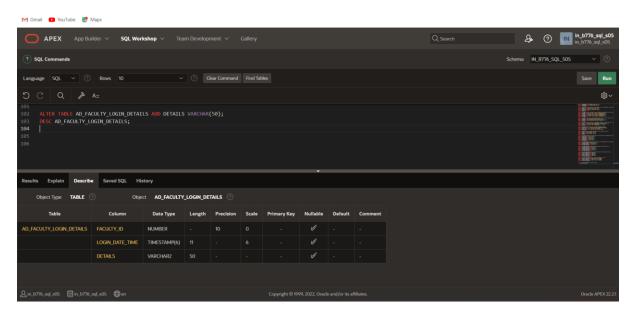
I:

J:

K:

L:

M:

Exercise 2: Updating Rows in the Tables Overview You will update the records in FACULTY_LOGIN_DETAILS table to include a DETAILS field in the table.

1. Alter the AD_FACULTY_LOGIN_DETAILS table to add a field called DETAILS make it a VARCHAR2(50) character field – it can have null values.

2. Update at least 2 records in the DETAILS column in the faculty login details table. **Note: You will have to look up the LOGIN_DATE_TIME values for the records being updated since it is part of the primary key.

⬆ SQL Commands   Schema   IN_B776_SQL_S05 ⌄ ⑦

Language SQL ⌄ ⑦   Rows 10 ⌄ ⑦   Clear Command   Find Tables   Save   Run

```
104
105  CREATE TABLE copy_FAC_LOGIN AS (SELECT* FROM AD_FACULTY_LOGIN_DETAILS);
106  INSERT INTO copy_FAC_LOGIN VALUES(800,'01-JUN-17 05.10.39.000PM','ABCDEFG');
107  INSERT INTO copy_FAC_LOGIN VALUES(800,'01-JUN-17 05.13.15.000PM','XYZ');
108  SELECT*FROM copy_FAC_LOGIN;
```

Results   Explain   Describe   Saved SQL   History

FACULTY_ID	LOGIN_DATE_TIME	DETAILS
800	01-JUN-17 05.13.15.000000 PM	-
810	01-JUN-17 05.13.12.000000 PM	-
820	01-JUN-17 05.10.31.000000 PM	-
800	01-JUN-17 05.10.39.000000 PM	-
800	01-JUN-17 05.13.15.000000 PM	XYZ
800	01-JUN-17 05.10.39.000000 PM	ABCDEFG

6 rows returned in 0.01 seconds   Download