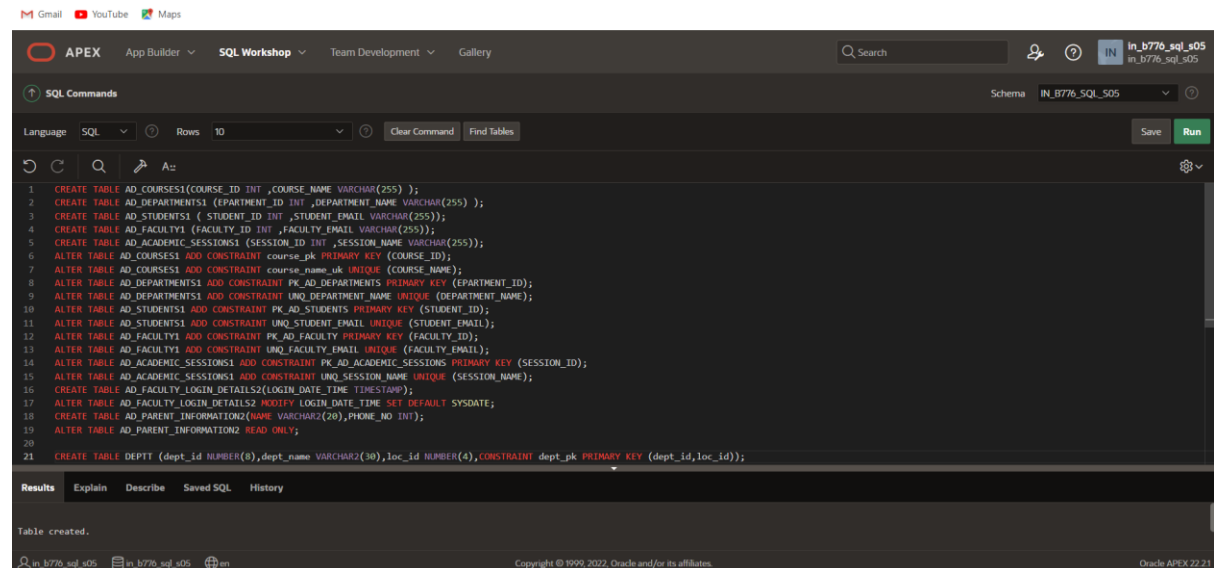


Altering the Tables

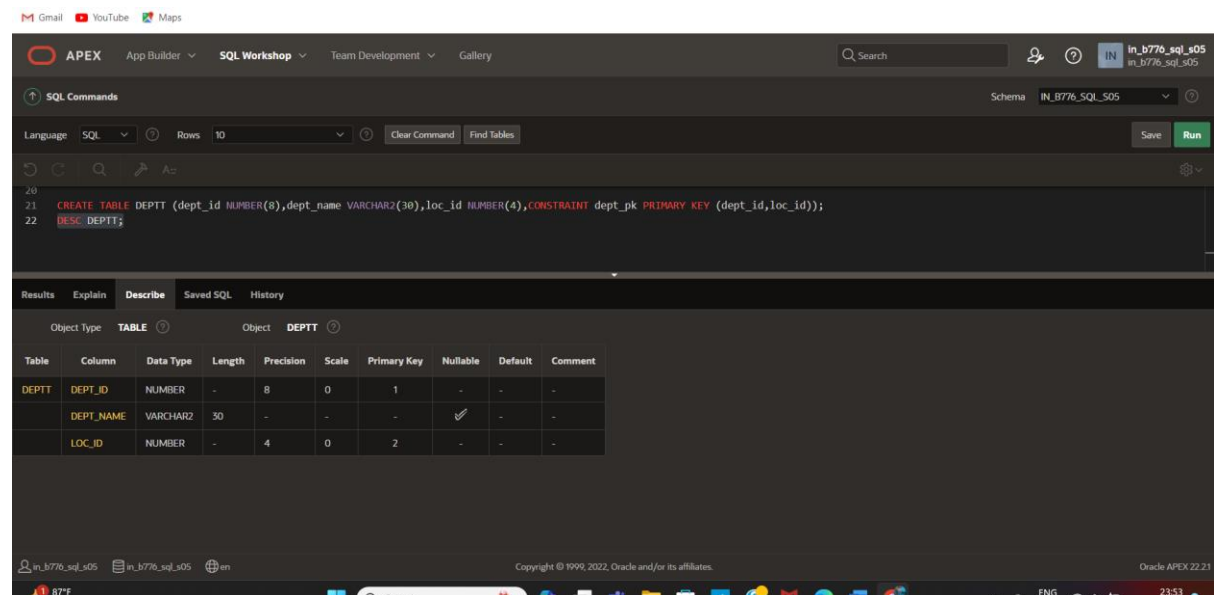
Alter the tables in the Academic Database to define the primary key, foreign key and unique constraints. Alter the table AD_FACULTY_LOGIN_DETAILS and specify a default value for the column LOGIN_DATE_TIME of SYSDATE. Set the AD_PARENT_INFORMATION table to a read-only status.



The screenshot shows the Oracle APEX SQL Workshop interface. The 'SQL Commands' tab is active, displaying a list of 21 SQL statements. The statements include creating tables AD_COURSES1, AD_DEPARTMENTS1, AD_STUDENTS1, AD_FACULTY1, AD_ACADEMIC_SESSIONS1, AD_FACULTY_LOGIN_DETAILS2, AD_PARENT_INFORMATION2, and DEPTT, along with various ALTER TABLE commands to add constraints and modify existing ones. The 'Run' button is visible on the right side of the command editor.

```
1 CREATE TABLE AD_COURSES1(COURSE_ID INT ,COURSE_NAME VARCHAR(255) );
2 CREATE TABLE AD_DEPARTMENTS1 (EPARTMENT_ID INT ,DEPARTMENT_NAME VARCHAR(255) );
3 CREATE TABLE AD_STUDENTS1 ( STUDENT_ID INT ,STUDENT_EMAIL VARCHAR(255));
4 CREATE TABLE AD_FACULTY1 (FACULTY_ID INT ,FACULTY_EMAIL VARCHAR(255));
5 CREATE TABLE AD_ACADEMIC_SESSIONS1 (SESSION_ID INT ,SESSION_NAME VARCHAR(255));
6 ALTER TABLE AD_COURSES1 ADD CONSTRAINT course_pk PRIMARY KEY (COURSE_ID);
7 ALTER TABLE AD_COURSES1 ADD CONSTRAINT course_name_uk UNIQUE (COURSE_NAME);
8 ALTER TABLE AD_DEPARTMENTS1 ADD CONSTRAINT PK_AD_DEPARTMENTS PRIMARY KEY (EPARTMENT_ID);
9 ALTER TABLE AD_DEPARTMENTS1 ADD CONSTRAINT UNQ_DEPARTMENT_NAME UNIQUE (DEPARTMENT_NAME);
10 ALTER TABLE AD_STUDENTS1 ADD CONSTRAINT PK_AD_STUDENTS PRIMARY KEY (STUDENT_ID);
11 ALTER TABLE AD_STUDENTS1 ADD CONSTRAINT UNQ_STUDENT_EMAIL UNIQUE (STUDENT_EMAIL);
12 ALTER TABLE AD_FACULTY1 ADD CONSTRAINT PK_AD_FACULTY PRIMARY KEY (FACULTY_ID);
13 ALTER TABLE AD_FACULTY1 ADD CONSTRAINT UNQ_FACULTY_EMAIL UNIQUE (FACULTY_EMAIL);
14 ALTER TABLE AD_ACADEMIC_SESSIONS1 ADD CONSTRAINT PK_AD_ACADEMIC_SESSIONS PRIMARY KEY (SESSION_ID);
15 ALTER TABLE AD_ACADEMIC_SESSIONS1 ADD CONSTRAINT UNQ_SESSION_NAME UNIQUE (SESSION_NAME);
16 CREATE TABLE AD_FACULTY_LOGIN_DETAILS2(LOGIN_DATE_TIME TIMESTAMP);
17 ALTER TABLE AD_FACULTY_LOGIN_DETAILS2 MODIFY LOGIN_DATE_TIME SET DEFAULT SYSDATE;
18 CREATE TABLE AD_PARENT_INFORMATION2(NAME VARCHAR(20),PHONE_NO INT);
19 ALTER TABLE AD_PARENT_INFORMATION2 READ ONLY;
20
21 CREATE TABLE DEPTT (dept_id NUMBER(8),dept_name VARCHAR2(30),loc_id NUMBER(4),CONSTRAINT dept_pk PRIMARY KEY (dept_id,loc_id));
```

Create the DEPTT table with the following structure



The screenshot shows the Oracle APEX SQL Workshop interface. The 'SQL Commands' tab is active, displaying the SQL statement to create the DEPTT table. The 'Describe' tab is selected, showing the table's structure with columns DEPT_ID, DEPT_NAME, and LOC_ID, their data types, lengths, and constraints.

```
20
21 CREATE TABLE DEPTT (dept_id NUMBER(8),dept_name VARCHAR2(30),loc_id NUMBER(4),CONSTRAINT dept_pk PRIMARY KEY (dept_id,loc_id));
22 DESC DEPTT;
```

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
DEPTT	DEPT_ID	NUMBER	-	8	0	1	-	-	-
	DEPT_NAME	VARCHAR2	30	-	-	-	✓	-	-
	LOC_ID	NUMBER	-	4	0	2	-	-	-

APEX App Builder SQL Workshop Team Development Gallery

Schema: IN_B776_SQL_S05

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

```

25 DESC SUPPLIERS;
26
27 CREATE TABLE PRODUCTS(PROD_ID NUMBER(10),SUP_ID NUMBER(10),SUP_NAME VARCHAR(10));
28 DESC PRODUCTS;
29

```

Results Explain Describe Saved SQL History

Object Type: TABLE Object: PRODUCTS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
PRODUCTS	PROD_ID	NUMBER	-	10	0	-	✓	-	-
	SUP_ID	NUMBER	-	10	0	-	✓	-	-
	SUP_NAME	VARCHAR2	10	-	-	-	✓	-	-

APEX App Builder SQL Workshop Team Development Gallery

Schema: IN_B776_SQL_S05

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

```

23
24 CREATE TABLE SUPPLIERS(SUP_ID NUMBER(10) PRIMARY KEY,SUP_NAME VARCHAR(30),CONTACT_NAME NUMBER(4));
25 DESC SUPPLIERS;

```

Results Explain Describe Saved SQL History

Object Type: TABLE Object: SUPPLIERS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
SUPPLIERS	SUP_ID	NUMBER	-	10	0	1	-	-	-
	SUP_NAME	VARCHAR2	30	-	-	-	✓	-	-
	CONTACT_NAME	NUMBER	-	4	0	-	✓	-	-