

Assignment-1

Name –Raj kumar

Branch – B.tech(computer science & engineering)

Uni Roll no -191500623

Sec-I

Sec Roll no -30

Sub – DBMS(Exprement-2 Assignment)

1. Create the following tables and specify constraints at the time of creation.

DEPARTMENT TABLE

The screenshot shows the Oracle Live SQL interface. The SQL Worksheet contains the following SQL code:

```
1 create table Department(  
2 Deptno number(3) primary key,  
3 Dname varchar2(20) unique,  
4 Location varchar2(20) not null check (Location in ('Delhi','Pune','Agra'))  
5 );  
6
```

Below the code, the message "Table created." is displayed. The interface includes a sidebar with navigation options like Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The top bar shows the user's name and email address.

EMPLOYEE TABLE

Teacher signature

Student signature

Assignment-1

The screenshot shows the Oracle Live SQL interface. The left sidebar contains navigation links: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled 'SQL Worksheet' and contains the following SQL code:

```
1 create table Employee(  
2 Empno varchar(5) check (Empno like 'e%') primary key,  
3 Ename varchar(20) unique,  
4 Designation varchar(20) not null,  
5 Salary number(10) default 25000 check (salary between 15000 and 50000),  
6 DOB date not null,  
7 DOB number(3) references department(Deptno)  
8 );
```

Below the code editor, the output area displays the error message: 'ORA-00942: table or view does not exist'. The bottom of the interface shows the Oracle logo, Integrated Cloud Applications & Platform Services, and copyright information for 2020 Oracle Corporation.

CONDIDATE TABLE

The screenshot shows the Oracle Live SQL interface. The left sidebar contains navigation links: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled 'SQL Worksheet' and contains the following SQL code:

```
1 create table candidate(  
2 Candidate_ID Number(6) Primary key,  
3 Candidate_Name Varchar(20) Not Null,  
4 Candidate_Email Varchar(30) Unique check(candidate_Email like 'SQ%.%'),  
5 Candidate_Dept varchar(2) Default 'HR',  
6 Manager_ID number(30) references condidate(candidate_ID)  
7 );
```

Below the code editor, the output area displays the error message: 'ORA-00942: table or view does not exist'. The bottom of the interface shows the Oracle logo, Integrated Cloud Applications & Platform Services, and copyright information for 2020 Oracle Corporation.

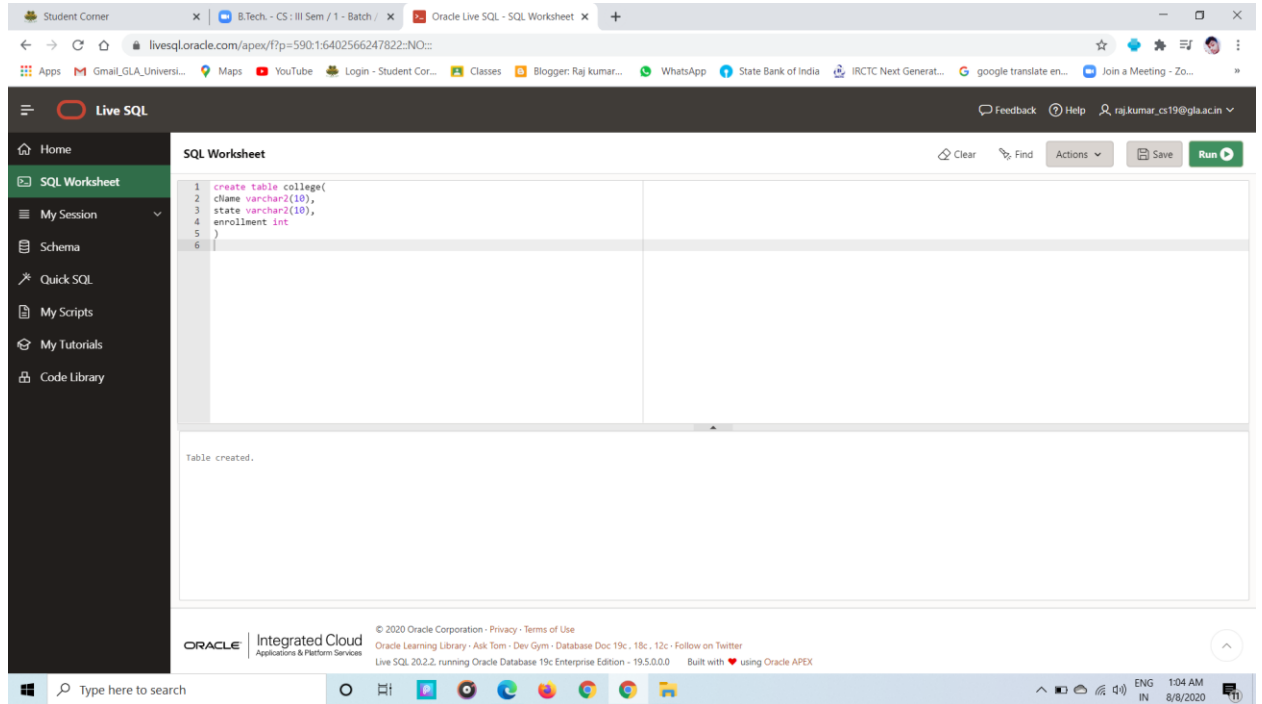
2. Create the schemas as specified above without specifying any constraints.

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COLLEGE



The screenshot shows the Oracle Live SQL web interface. The browser tabs include 'Student Corner', 'B.Tech. - CS : III Sem / 1 - Batch /', and 'Oracle Live SQL - SQL Worksheet'. The address bar shows the URL 'livesql.oracle.com/apex/?p=590:1:6402566247822:NO...'. The interface has a dark sidebar on the left with navigation options: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled 'SQL Worksheet' and contains a code editor with the following SQL script:

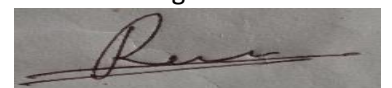
```
1 create table college(  
2   clame varchar2(10),  
3   state varchar2(10),  
4   enrollment int  
5 )  
6
```

Below the code editor, the message 'Table created.' is displayed. The footer of the interface includes the Oracle logo, 'Integrated Cloud Applications & Platform Services', and copyright information: '© 2020 Oracle Corporation - Privacy - Terms of Use'. It also mentions 'Oracle Learning Library - Ask Tom - Dev Gym - Database Doc 19c, 18c, 12c - Follow on Twitter' and 'Live SQL 20.2.2, running Oracle Database 19c Enterprise Edition - 19.5.0.0.0 Built with ❤️ using Oracle APEX'. The Windows taskbar at the bottom shows the search bar and several application icons.

STUDENT

Teacher signature

Student signature



Assignment-1

The screenshot shows the Oracle Live SQL web interface. The left sidebar contains navigation links: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled 'SQL Worksheet' and contains the following SQL code:

```
1 create table Student(  
2 sID int,  
3 sName varchar2(10),  
4 GPA number(2,1),  
5 sizeHS int  
6 )  
7
```

Below the code editor, the message 'Table created.' is displayed. The bottom of the interface shows the Oracle logo, 'Integrated Cloud Applications & Platform Services', and copyright information: '© 2020 Oracle Corporation - Privacy - Terms of Use'. The browser's address bar shows the URL 'livesql.oracle.com/apex/f?p=590:16402566247822:NO::'. The Windows taskbar at the bottom shows the time as 1:10 AM on 8/8/2020.

APPLY

The screenshot shows the Oracle Live SQL web interface. The left sidebar contains navigation links: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled 'SQL Worksheet' and contains the following SQL code:

```
1 create table Apply(  
2 sID int,  
3 cName varchar2(10),  
4 major varchar2(20)  
5 )  
6
```

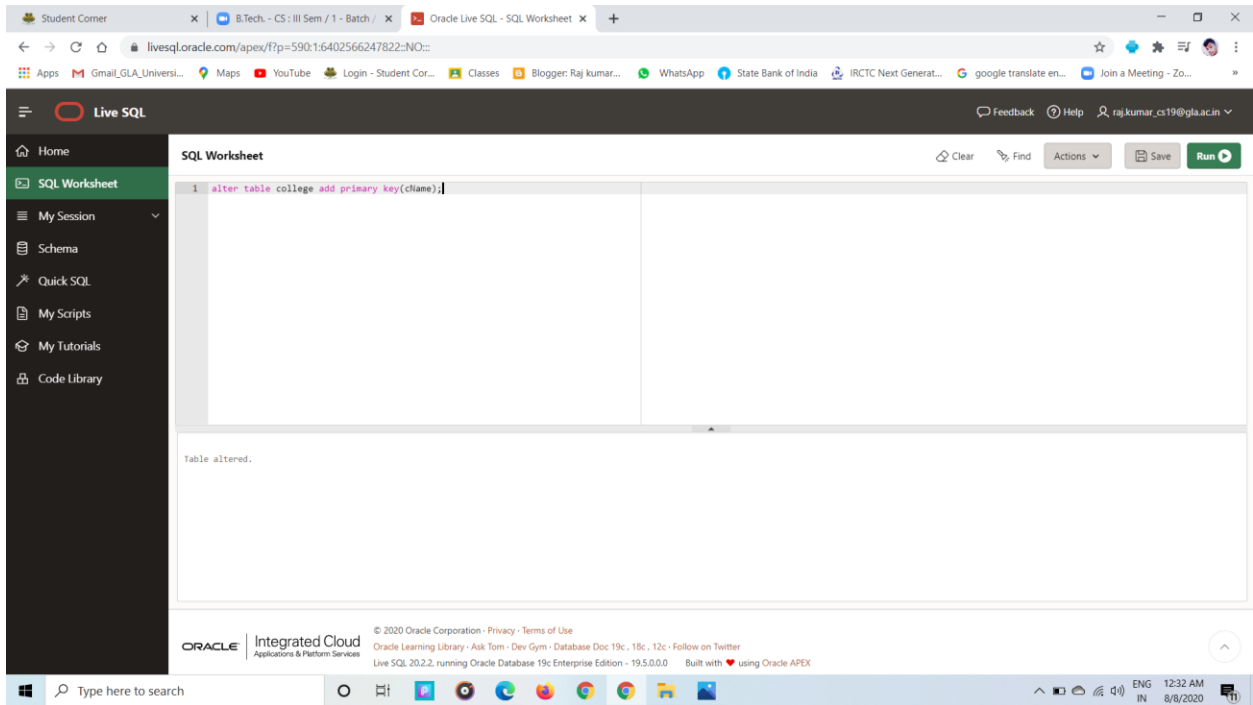
Below the code editor, the message 'Table created.' is displayed. The bottom of the interface shows the Oracle logo, 'Integrated Cloud Applications & Platform Services', and copyright information: '© 2020 Oracle Corporation - Privacy - Terms of Use'. The browser's address bar shows the URL 'livesql.oracle.com/apex/f?p=590:16402566247822:NO::'. The Windows taskbar at the bottom shows the time as 1:11 AM on 8/8/2020.

(i) Add cName as Primary key in College.

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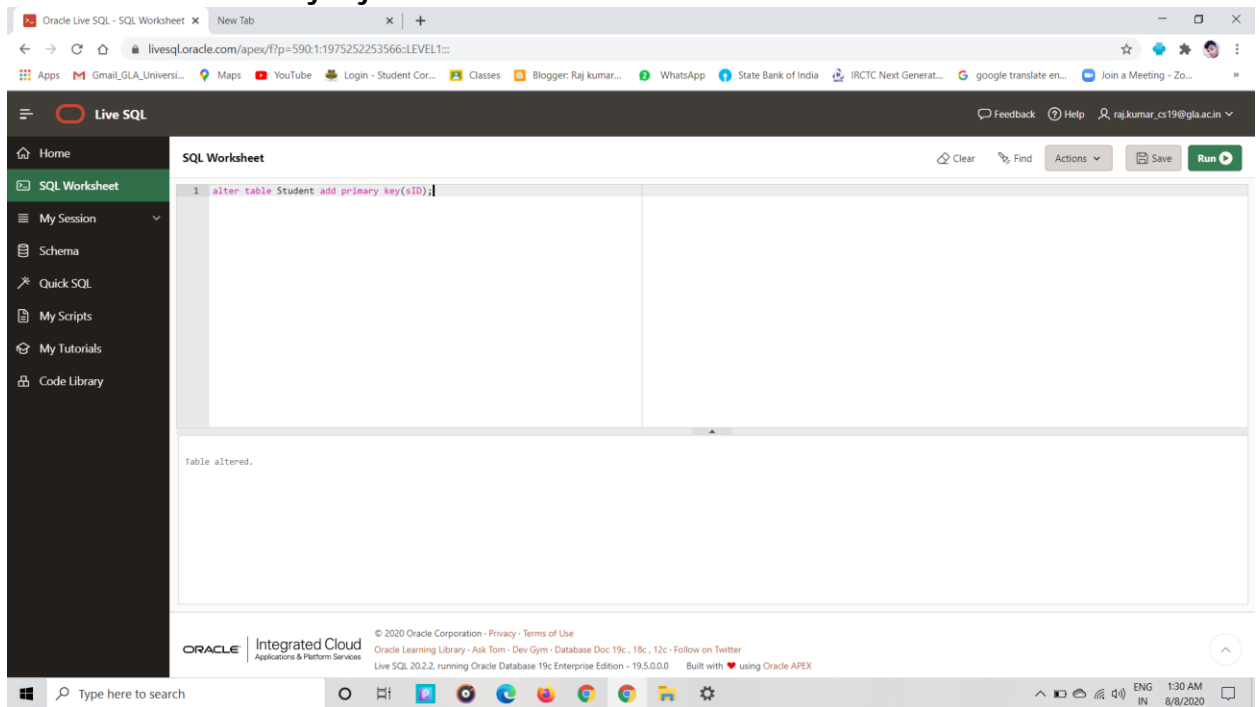
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The screenshot shows the Oracle Live SQL web interface. The left sidebar contains navigation links: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled 'SQL Worksheet' and contains a text editor with the SQL command: `1 alter table college add primary key(cname);`. Below the editor, a message states 'Table altered.' The footer of the interface includes the Oracle logo, 'Integrated Cloud Applications & Platform Services', and copyright information for 2020 Oracle Corporation.

(ii) Add sID as Primarykey in Student.

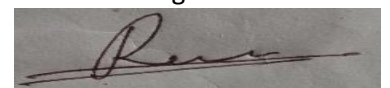


The screenshot shows the Oracle Live SQL web interface. The left sidebar contains navigation links: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled 'SQL Worksheet' and contains a text editor with the SQL command: `1 alter table Student add primary key(sID);`. Below the editor, a message states 'Table altered.' The footer of the interface includes the Oracle logo, 'Integrated Cloud Applications & Platform Services', and copyright information for 2020 Oracle Corporation.

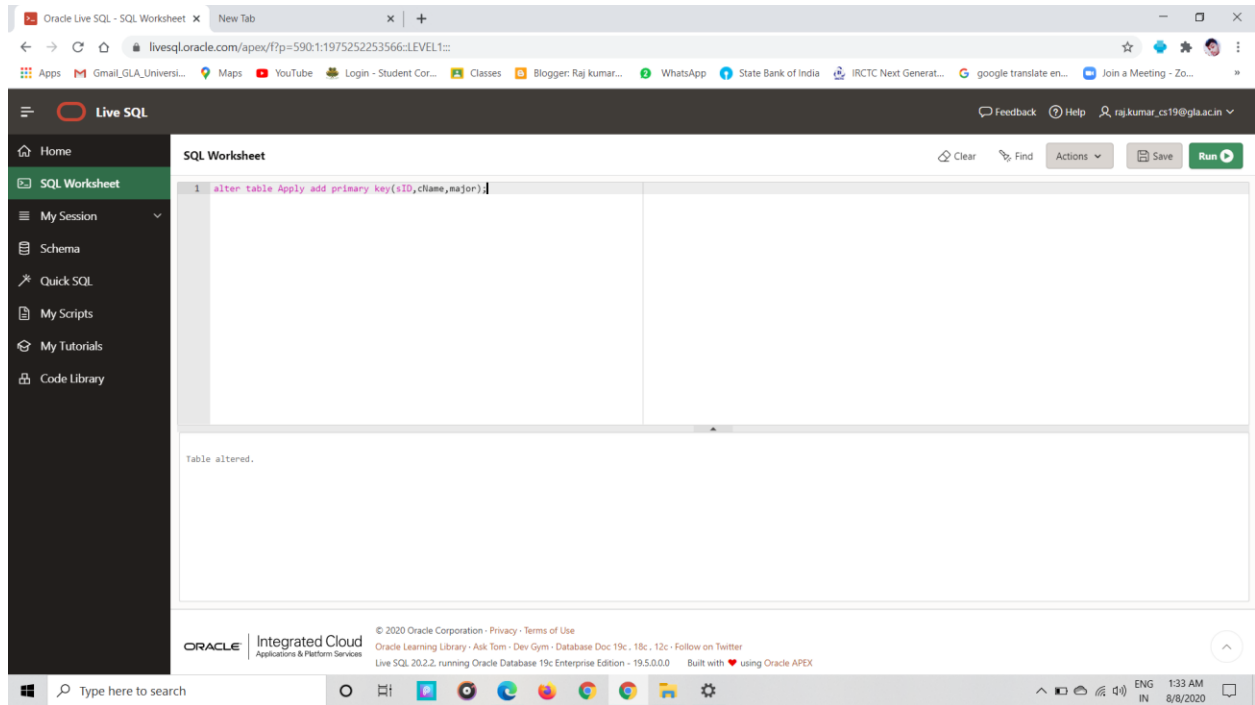
(iii) Add sID, cName, major as Primarykey in Apply.

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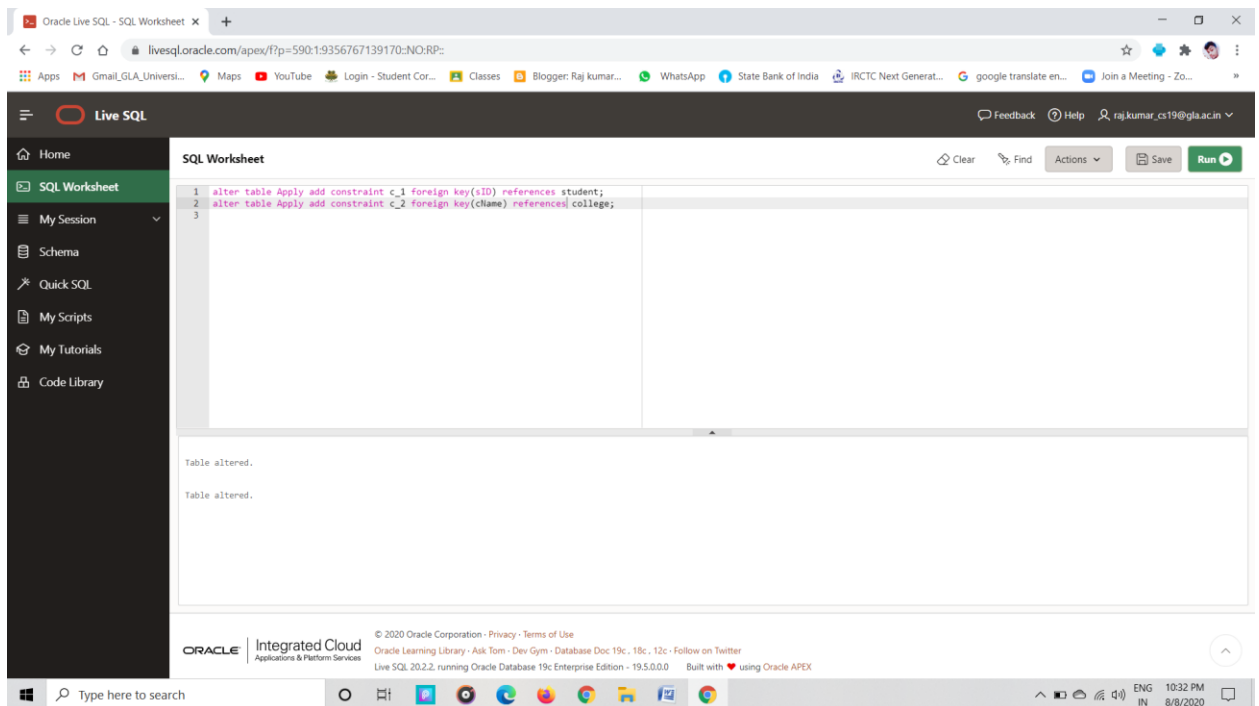
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- (iv) Make sID in Apply foreign key referring table student and cName referring table college.

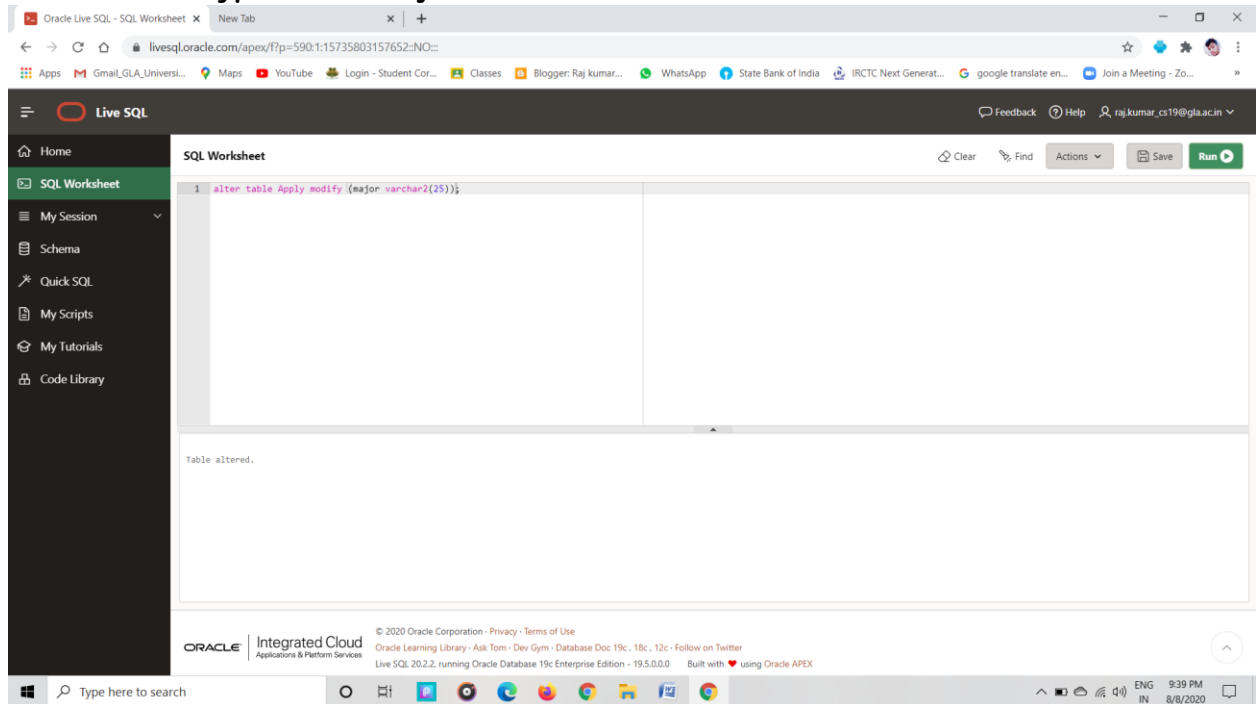


Teacher signature

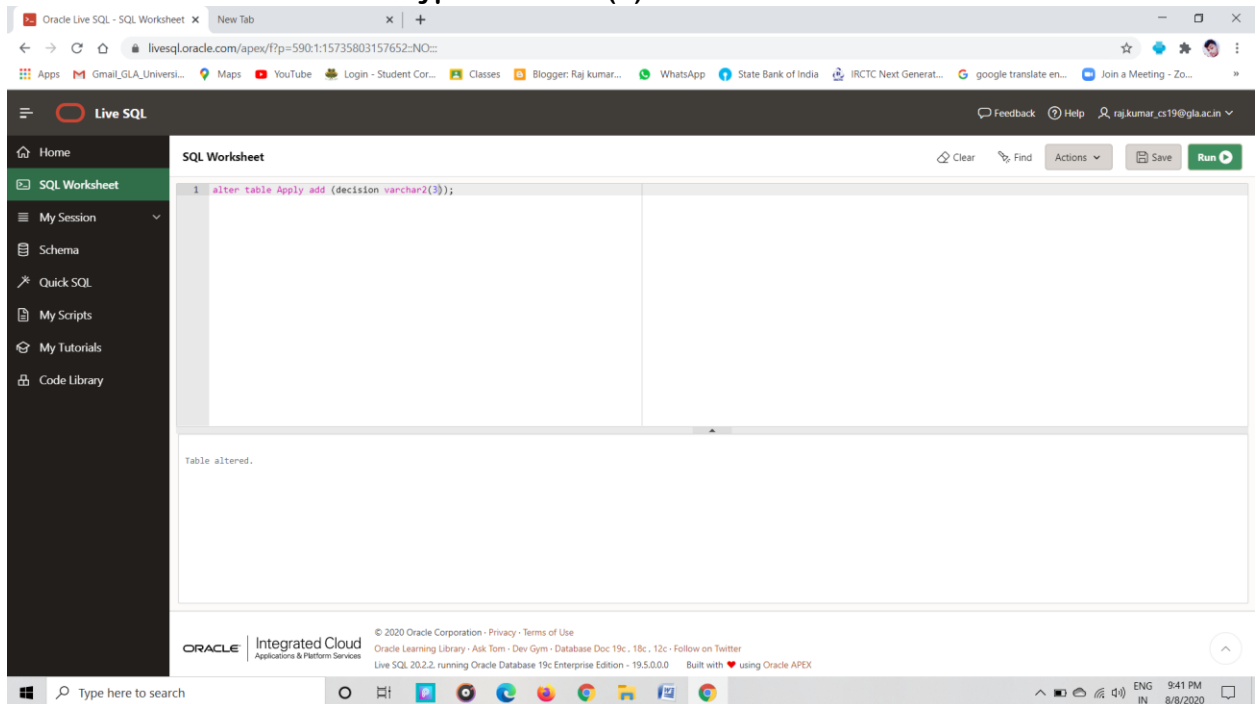
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(v) Increase data type size of major from 20 to 25.



(vi) Add a new column decision in the Apply table keeping a constraint of not null for this column with data type varchar2(3).



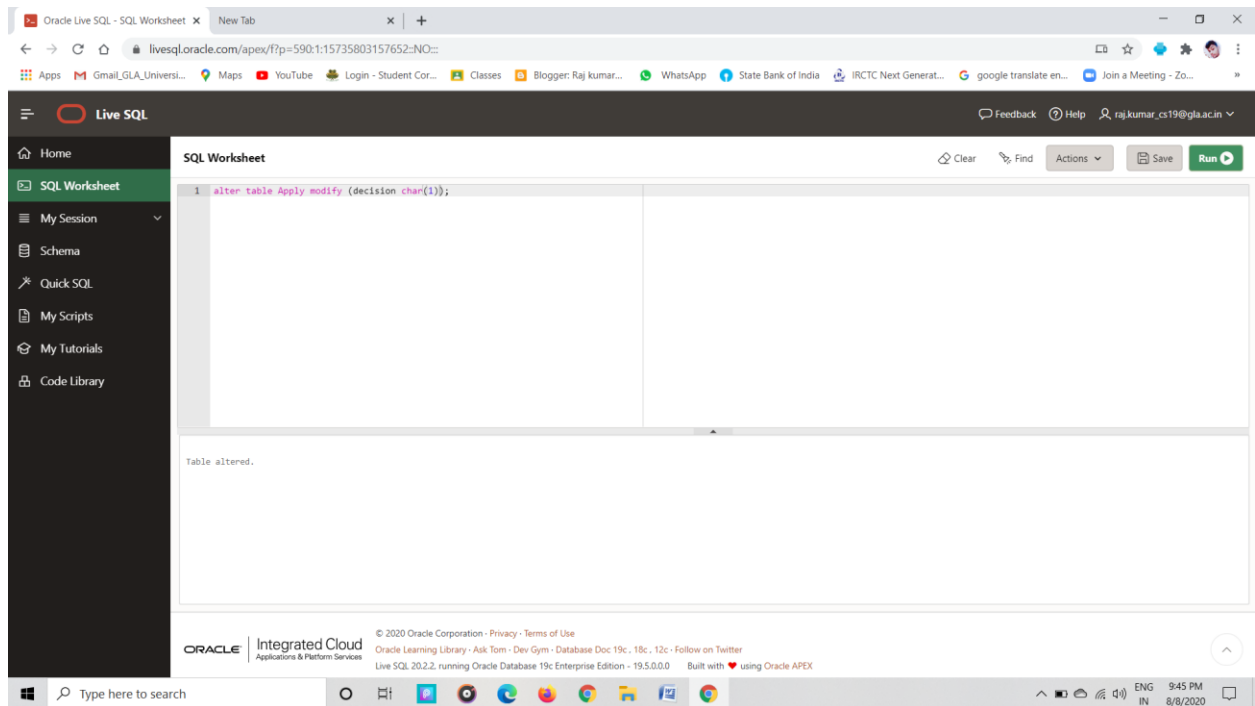
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(vii) Change data type of decision in Apply to char(1).



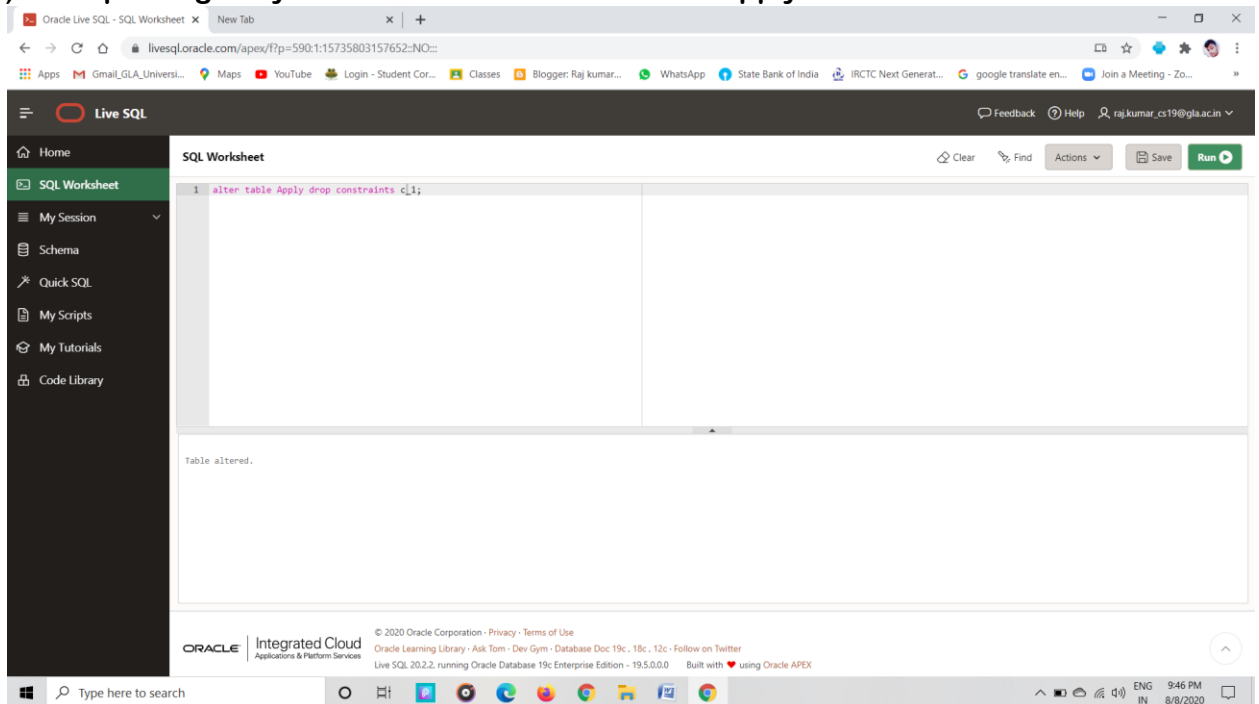
The screenshot shows the Oracle Live SQL interface. The SQL Worksheet contains the following statement:

```
1 alter table Apply modify (decision char(1));
```

The output area displays the message: "Table altered."

The interface includes a sidebar with navigation options: Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The footer shows the Oracle logo, Integrated Cloud, and copyright information for 2020 Oracle Corporation.

(viii) Drop foreign key on column name cName from Apply table.



The screenshot shows the Oracle Live SQL interface. The SQL Worksheet contains the following statement:

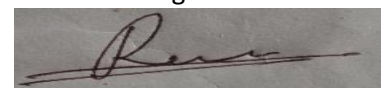
```
1 alter table Apply drop constraints c1;
```

The output area displays the message: "Table altered."

The interface includes a sidebar with navigation options: Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The footer shows the Oracle logo, Integrated Cloud, and copyright information for 2020 Oracle Corporation.

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(ix) Remove column sizeHS from Student table.

The screenshot shows the Oracle Live SQL interface. The left sidebar contains navigation links: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled 'SQL Worksheet' and contains a single line of SQL code: `1 alter table student drop column sizeHS;`. Below the code editor, a message states 'Table altered.' The bottom of the interface shows the Oracle logo, 'Integrated Cloud' branding, and copyright information for 2020 Oracle Corporation. The browser's address bar shows the URL `livesql.oracle.com/apex/f?p=590:1:15735803157652:NO::`. The Windows taskbar at the bottom shows the time as 9:48 PM on 8/8/2020.

(x) Drop primary key from College

The screenshot shows the Oracle Live SQL interface. The left sidebar contains navigation links: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled 'SQL Worksheet' and contains a single line of SQL code: `1 alter table college drop primary key;`. Below the code editor, a message states 'Table altered.' The bottom of the interface shows the Oracle logo, 'Integrated Cloud' branding, and copyright information for 2020 Oracle Corporation. The browser's address bar shows the URL `livesql.oracle.com/apex/f?p=590:1:15735803157652:NO::`. The Windows taskbar at the bottom shows the time as 9:51 PM on 8/8/2020.

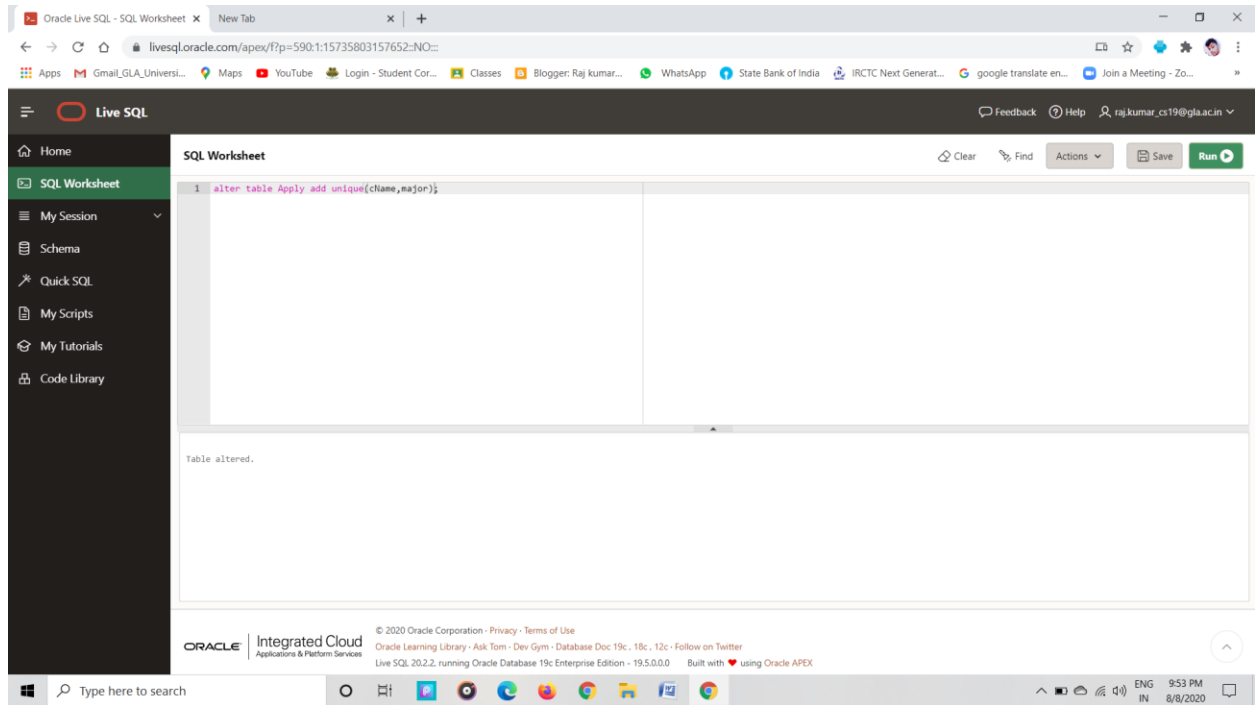
(xi) Make cName, majorunique pairwise such as Stanford CS, Stanford EE.

Teacher signature

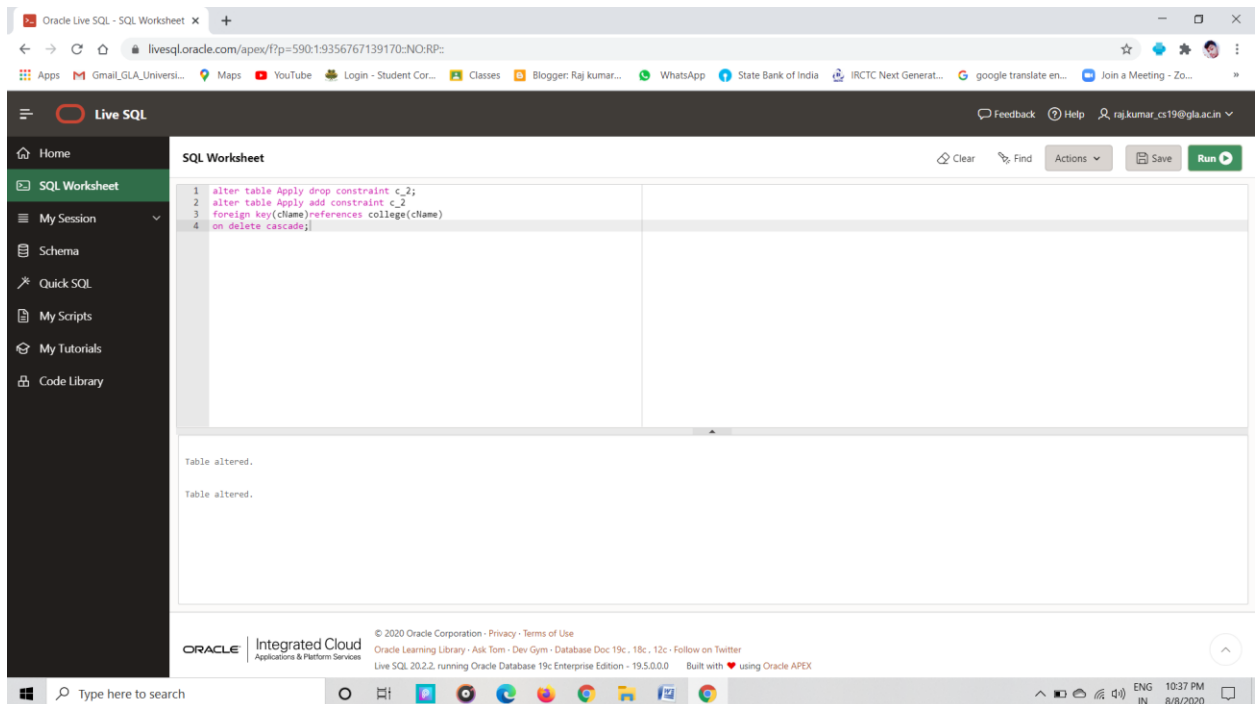
Student signature

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- (xii) Add cName as Foreign Key in Apply table referring table College using on delete cascade.



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(xiii) Modify foreign key on sID in Apply table to foreign key on delete set null.

The screenshot shows the Oracle Live SQL web interface. The browser address bar displays the URL: `livesql.oracle.com/apex/?p=590:1:15735803157652:NO::`. The interface includes a sidebar with navigation options: Home, SQL Worksheet (selected), My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area is titled "SQL Worksheet" and contains a script editor with the following SQL code:

```
1 alter table Apply
2 drop constraint c_1;
3 alter table Apply add constraint c_1
4 foreign key (sID) references student(sID)
5 on delete set null;
```

Below the script editor, the output area shows the message "Table altered." repeated twice. The footer of the interface includes the Oracle logo, "Integrated Cloud Applications & Platform Services", and copyright information: "© 2020 Oracle Corporation - Privacy - Terms of Use". It also mentions "Oracle Learning Library - Ask Tom - Dev Gym - Database Doc 19c, 18c, 12c - Follow on Twitter" and "Live SQL 20.2.2, running Oracle Database 19c Enterprise Edition - 19.5.0.0.0 Built with using Oracle APEX". The Windows taskbar at the bottom shows the search bar and various application icons, with the system clock indicating 10:18 PM on 8/8/2020.

(xiv) Rename column enrollment to enroll in College Table.

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The screenshot displays the Oracle Live SQL web application. The browser's address bar shows the URL `livesql.oracle.com/apex/f?p=590:1:15735803157652:NO::`. The application's top navigation bar includes a 'Live SQL' logo, a 'Feedback' link, a 'Help' link, and a user profile for 'raj.kumar_cs19@glia.ac.in'. A left-hand sidebar contains a menu with options: 'Home', 'SQL Worksheet' (which is currently selected), 'My Session', 'Schema', 'Quick SQL', 'My Scripts', 'My Tutorials', and 'Code Library'. The main workspace is titled 'SQL Worksheet' and contains a single line of SQL code: `1 alter table college rename column enrollment to enrol;`. Below the code editor, a message box displays the text 'Table altered.' in green. At the bottom of the page, there is a footer with Oracle branding, copyright information for 2020, and details about the software version (Live SQL 20.2.2) and the database (Oracle Database 19c Enterprise Edition - 19.5.0.0.0). The Windows taskbar at the very bottom shows the search bar and several application icons.

Teacher signature

Student signature

A handwritten signature in black ink, appearing to read 'Raj', is written on a light-colored background.