**Name- Yash Jain**

**Course- B.Tech (H.)- CSE- 2nd Yr- III sem**

**RollNo-31**

**University RollNo- 2215800033**

# Assignment-2 DBMS

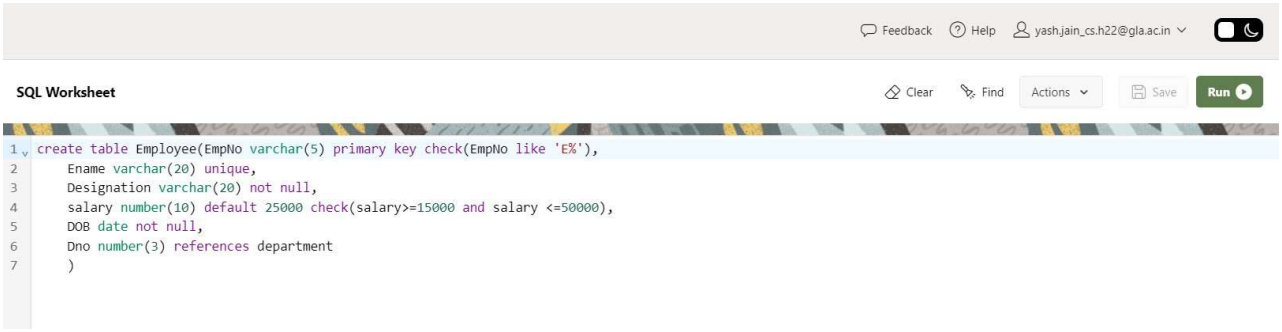
1. Create the following tables and specify constraints at the time of creation

**Department**

| Column Name | Data Type | Size | Constraint |
|---|---|---|---|
| Deptno | number | 3 | primary key |
| Dname | varchar2 | 20 | Unique |
| Location | varchar2 | 20 | not null, department are located in Delhi, Pune, Agra |


**Employee**

| Column Name | Data Type | Size | Constraint |
|---|---|---|---|
| Empno | varchar2 | 5 | primary key, should start with 'E' |
| Ename | varchar2 | 20 | Unique |
| Designation | varchar2 | 20 | not null |
| Salary | number | 10 | default 25000, must lie between 15000 and 50000 |
| DOB | date | | not null |
| Dno | number | 3 | foreign key (references department) |




```sql
create table Employee(EmpNo varchar(5) primary key check(EmpNo like 'E%'),
    Ename varchar(20) unique,
    Designation varchar(20) not null,
    salary number(10) default 25000 check(salary>=15000 and salary <=50000),
    DOB date not null,
    Dno number(3) references department
    )
```

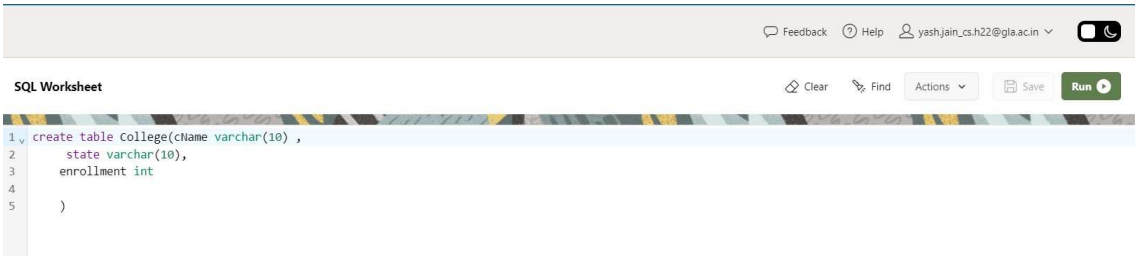
**Candidate**

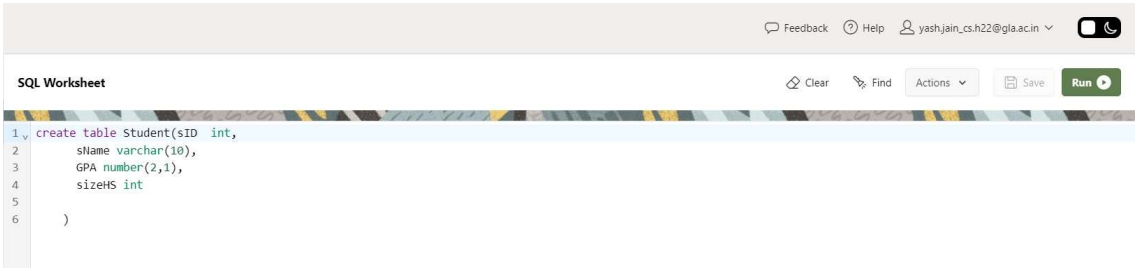
| Column Name | Data type | Size | Constraints |
|---|---|---|---|
| Candidate_ID | Number | 6 | Primary key of the table |
| Candidate_Name | Varchar2 | 20 | Not Null |
| Candidate_Email | Varchar2 | 30 | Unique, Must have '@' followed by '.' in between the email |
| Candidate_Dept | Varchar2 | 2 | Default 'HR' |
| Manager_ID | Number | 6 | It can take only those values which are present in Candidate_ID column |

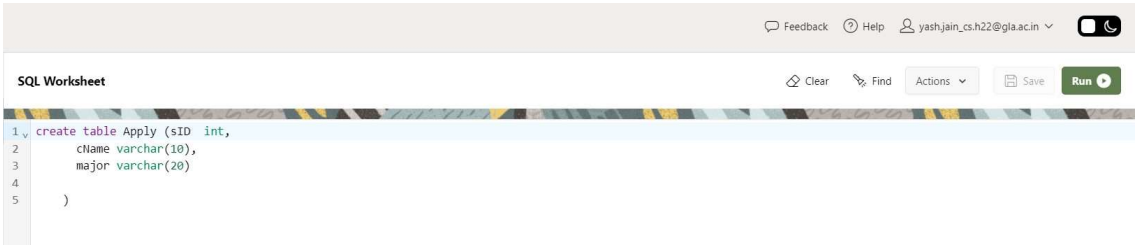

```sql
create table Candidate(Candidate_ID Number(6) primary key ,
    Candidate_Name varchar(20) not null,
    Candidate_Email varchar(30) Unique check(Candidate_Email like '%@%.com'),
    Candidate_Dept varchar(2) default 'HR',
    Manager_ID  Number(6)  references Candidate
    )
```

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

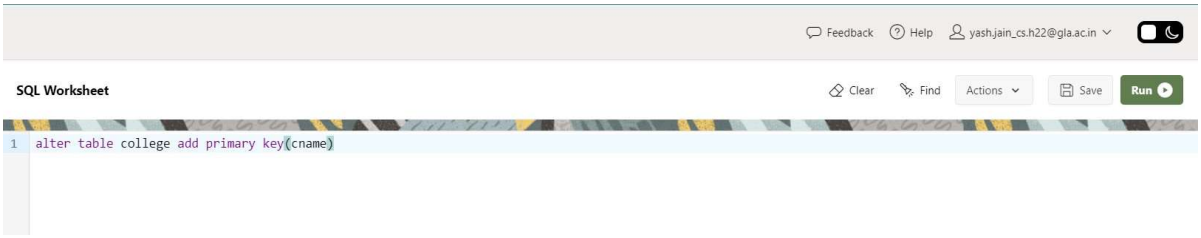
## Table Creation:



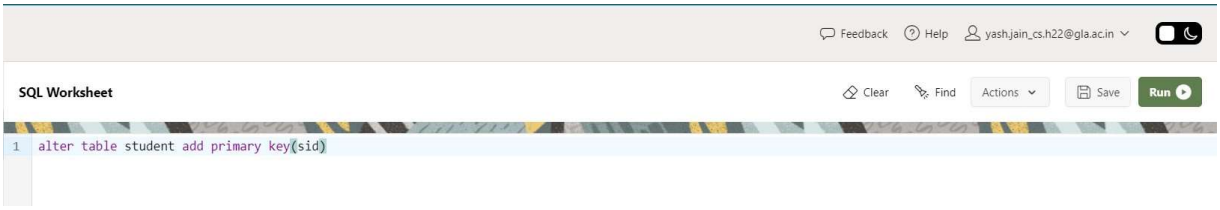



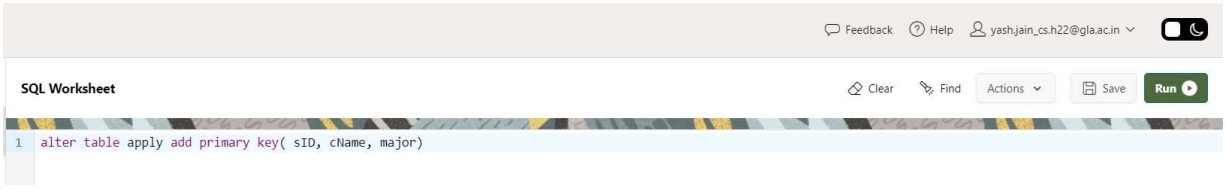
1. Add cName as Primary key in College.



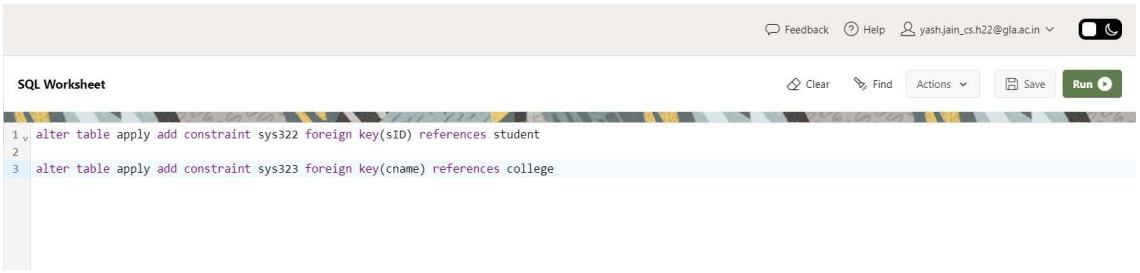

2. Add sID as Primary key in Student.



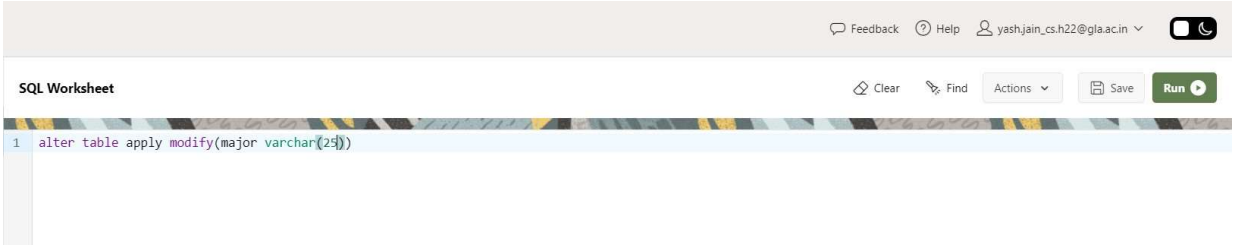

3. Add sID, cName, major as Primary key in Apply.



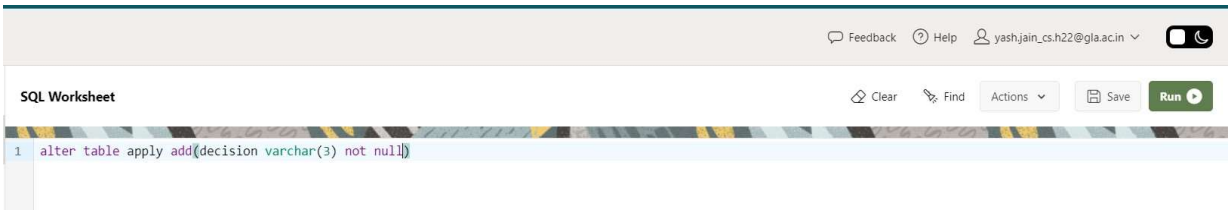

4. Make sID in Apply foreign key referring table student and cName referring table college.



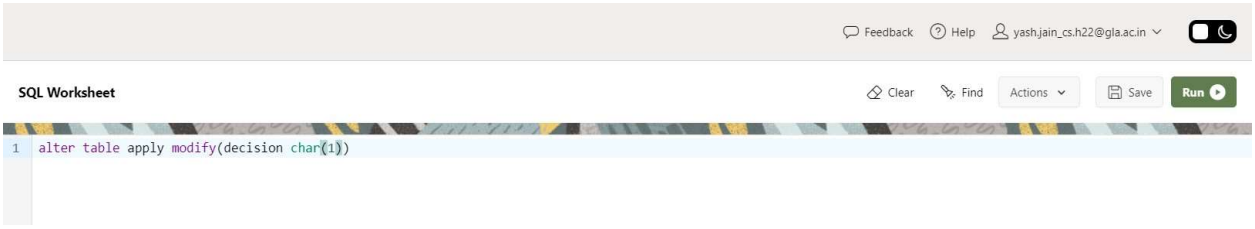

5. Increase data type size of major from 20 to 25.



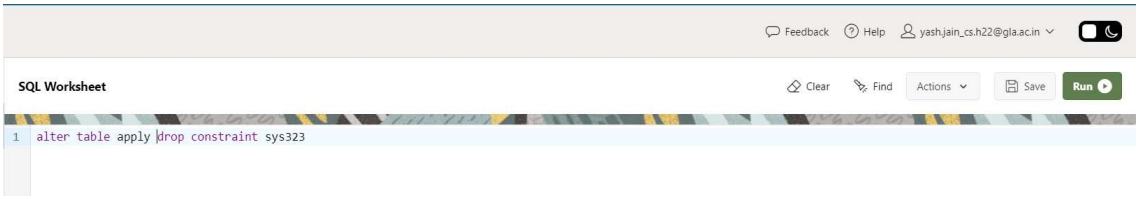

6. Add a new column decision in the Apply table keeping a constraint of not null for this column with data type varchar2(3).



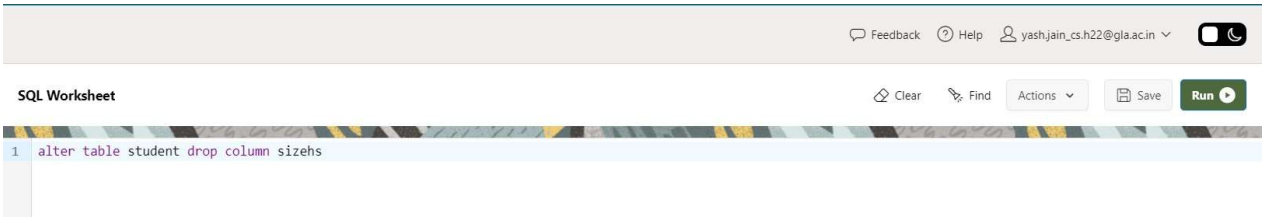

7. Change data type of decision in Apply to char(1).



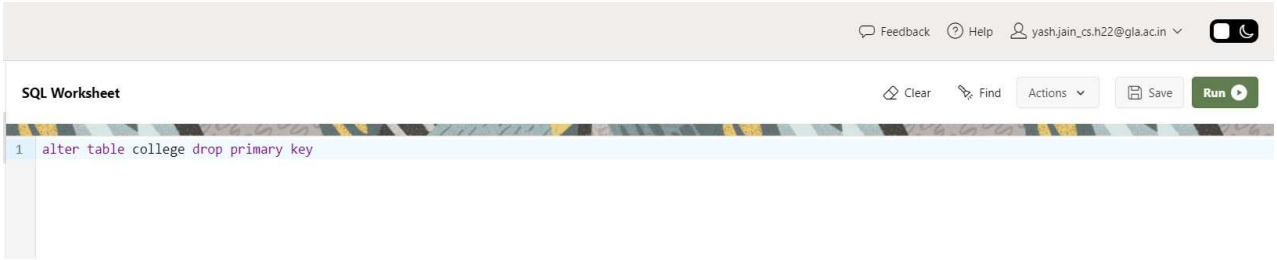

8. Drop foreign key on column name cName from Apply table.



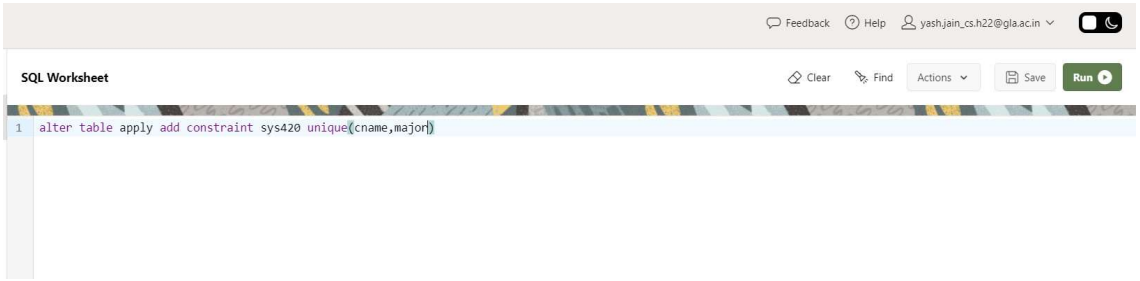

9. Remove column sizeHS from Student table.



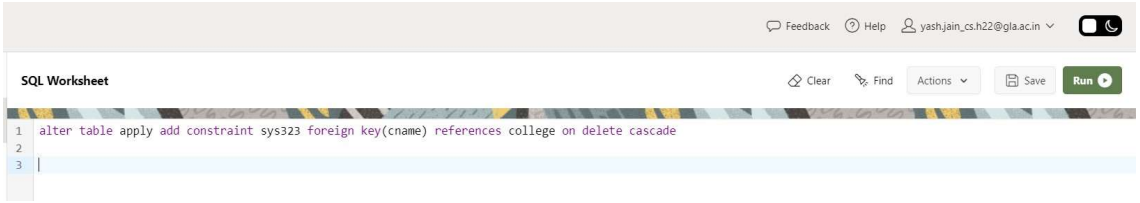

10. Drop primary key from College



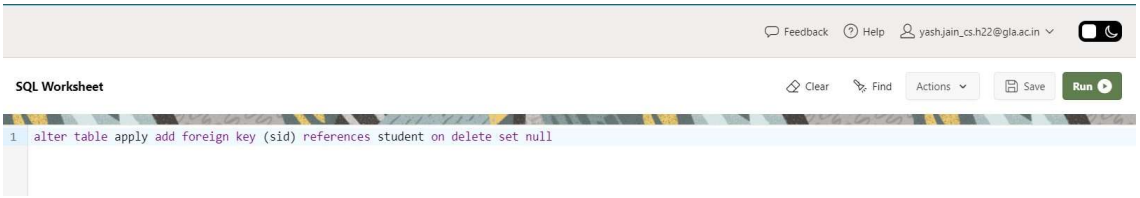

11. Make cName, major unique pairwise such as Stanford CS, Stanford EE.




12. Add cName as Foreign Key in Apply table referring table College using on delete cascade.




13. Modify foreign key on sID in Apply table to foreign key on delete set null.




14. Rename column enrollment to enroll in College Table.