**Name** ➔ *Laxman kumar Vashist*

**Class** ➔ *BTech. 2nd Year { E }*

**University RollNo.** ➔ *1915000429*

**Class RollNo.** ➔ *'37'*

**Subject** ➔ *Database Management Systems Lab*

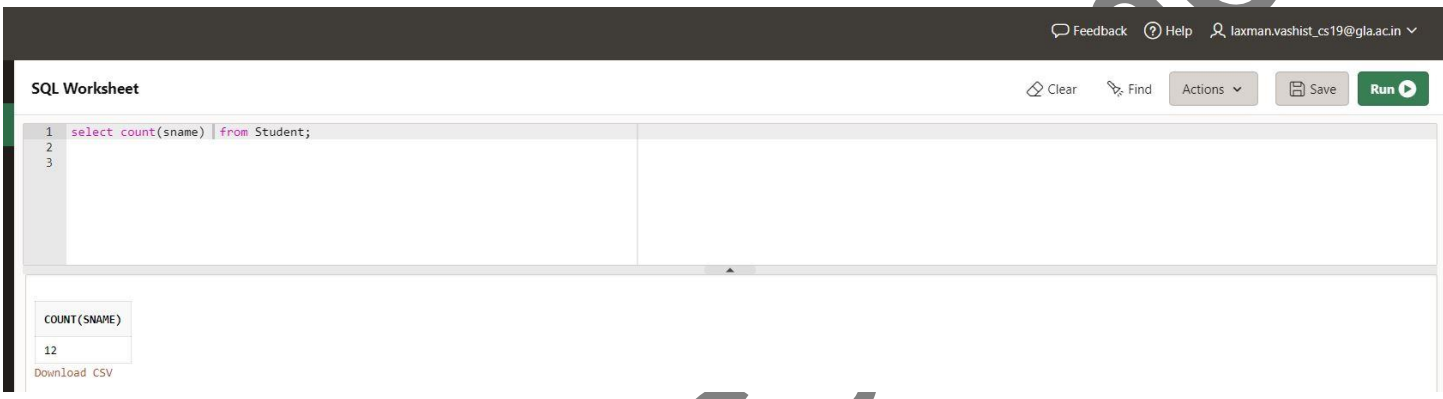
**Subject Code** ➔ *BCSC 0802*

**Subject Teacher** ➔ *MRS. Gunjan Bharadwaj*

**Qus 1 ➔** Count the total number of Students.

**CODE➔**

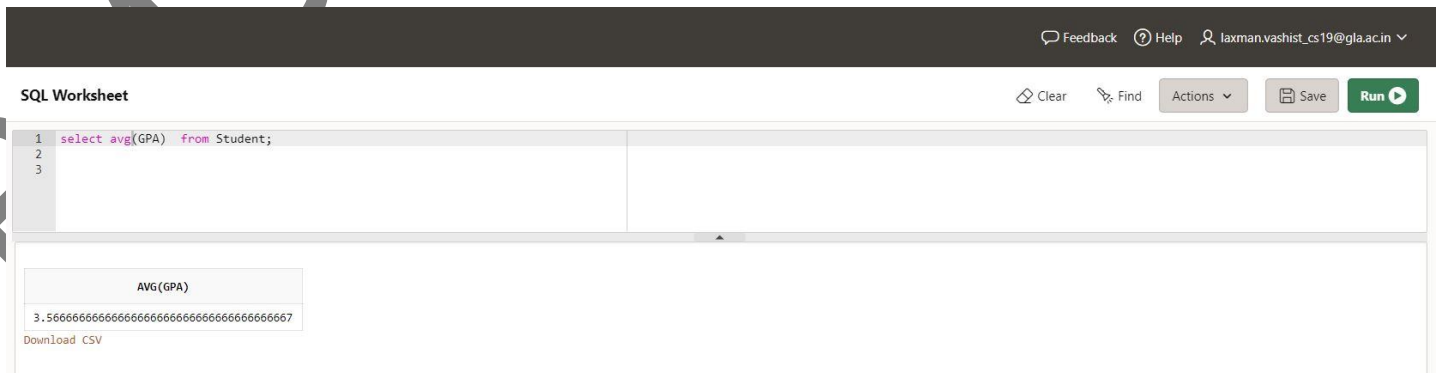
======




**Qus 2 ➔** Calculate the average GPA of all Student.

**CODE➔**

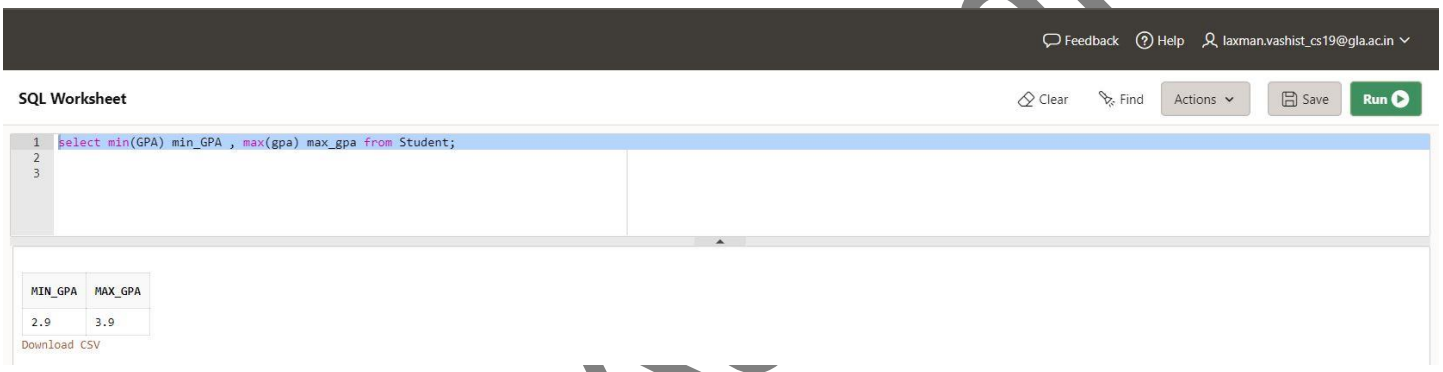
======



**Qus 3 ➔** Determine the minimum and maximum GPA. Rename the titles as 'max_GPA' and 'min_GPA' respectively.

**CODE➔**

======




**Qus 4 ➔** Count the number of students having GPA greater than or equal to 3.7.

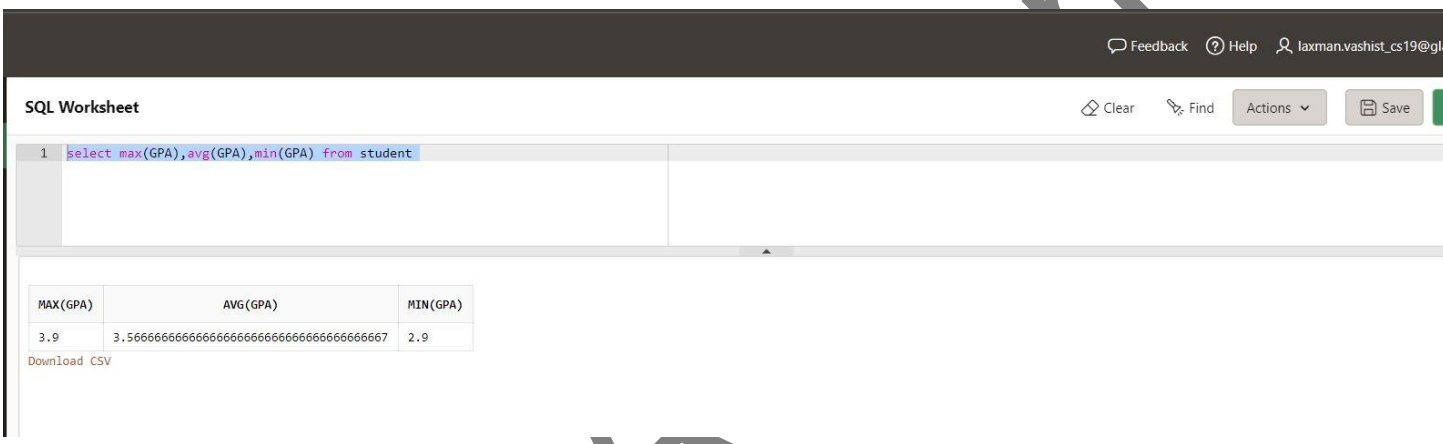
**CODE➔**

======

**Qus 5 ➔** Find Maximum, Average, Minimum, total GPA of all student.

**CODE➔**

**======**




**Qus 6 ➔** Find total number of colleges in our Application Database.

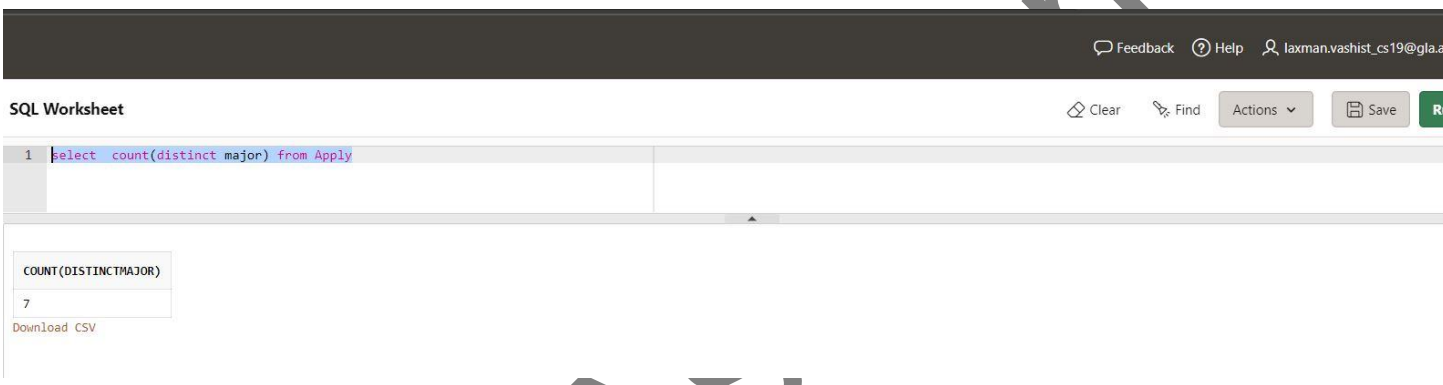
**CODE➔**

**======**

**Qus 7 ➔** Find how many different majors student had applied in.

**CODE➔**

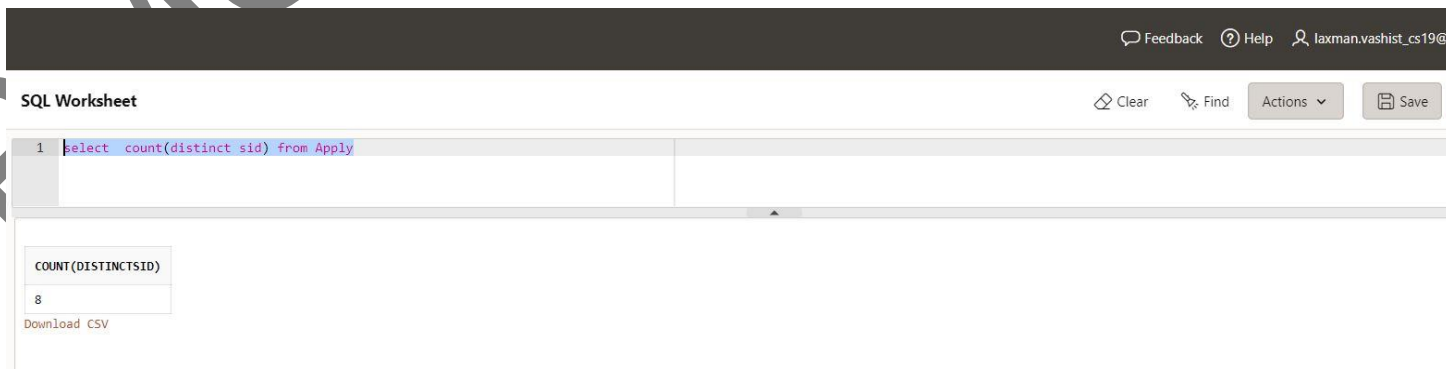
**======**




**Qus 8 ➔** Find total no. of Applications in our Application System's Database.

**CODE➔**

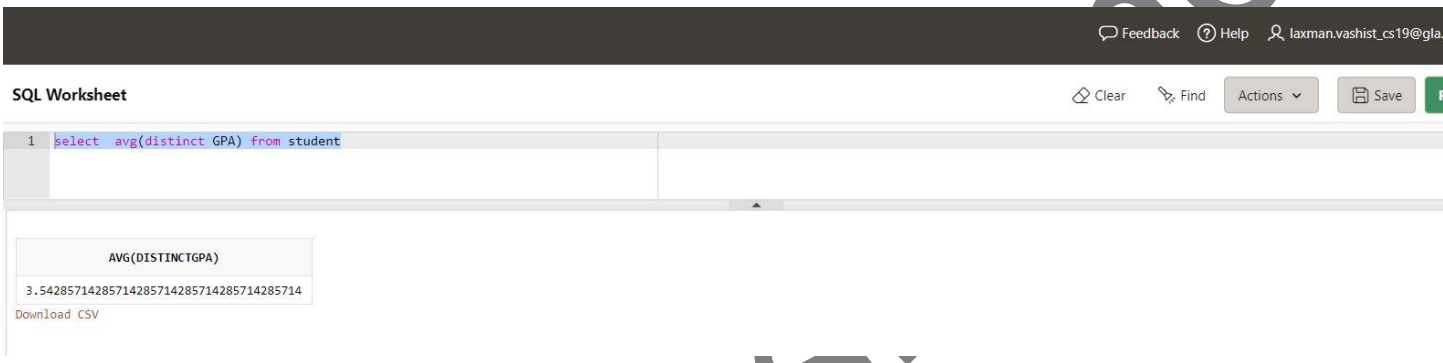
**======**



**Qus 9 ➔** Find average of all distinct GPA.

**CODE➔**

**======**




**Qus 10 ➔** Display the total number of application accepted.

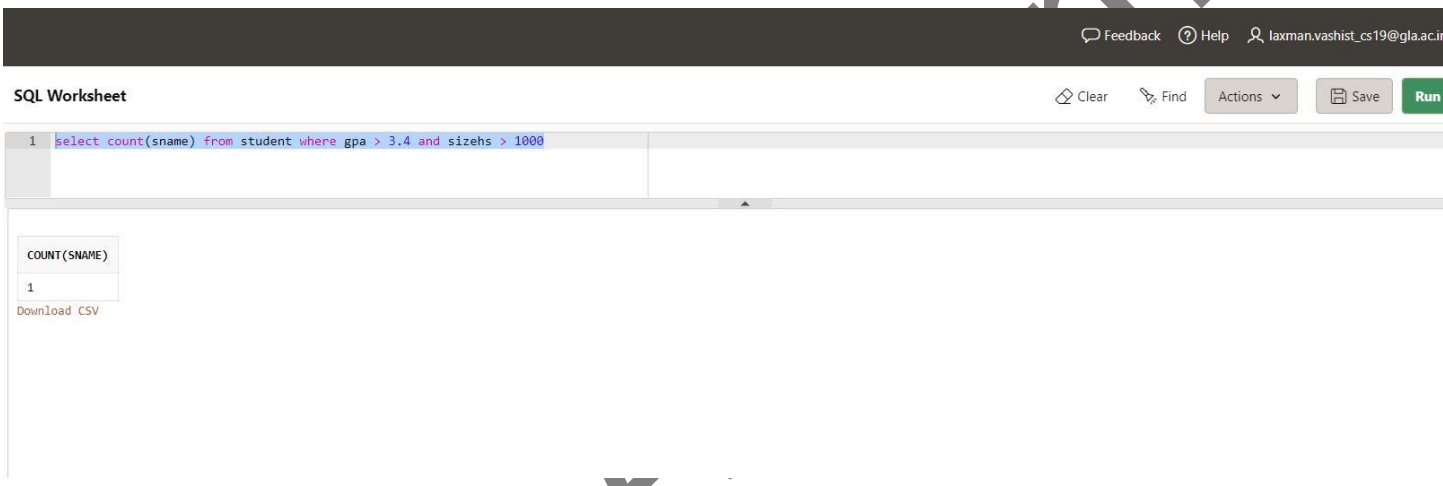
**CODE➔**

**=======**

**QUS 11 ➔** Find number of students having GPA>3.4 and coming from high school having size>1000.

**CODE➔**

**======**




**QUS 12 ➔** Find how many student applied to 'marine biology'.

**CODE➔**

**======**

**Qus 13 ➔** Find how many applications were rejected and accepted by the colleges.

**CODE➔**

**======**

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SQL Worksheet

Clear Find Actions Save Run

```
1  select count(decision) as application_accept from Apply where decision = 'Y' ;
2  select count (decision) as application_rejected from apply where decision = 'N'
```

| APPLICATION_ACCEPT |
| --- |
| 11 |

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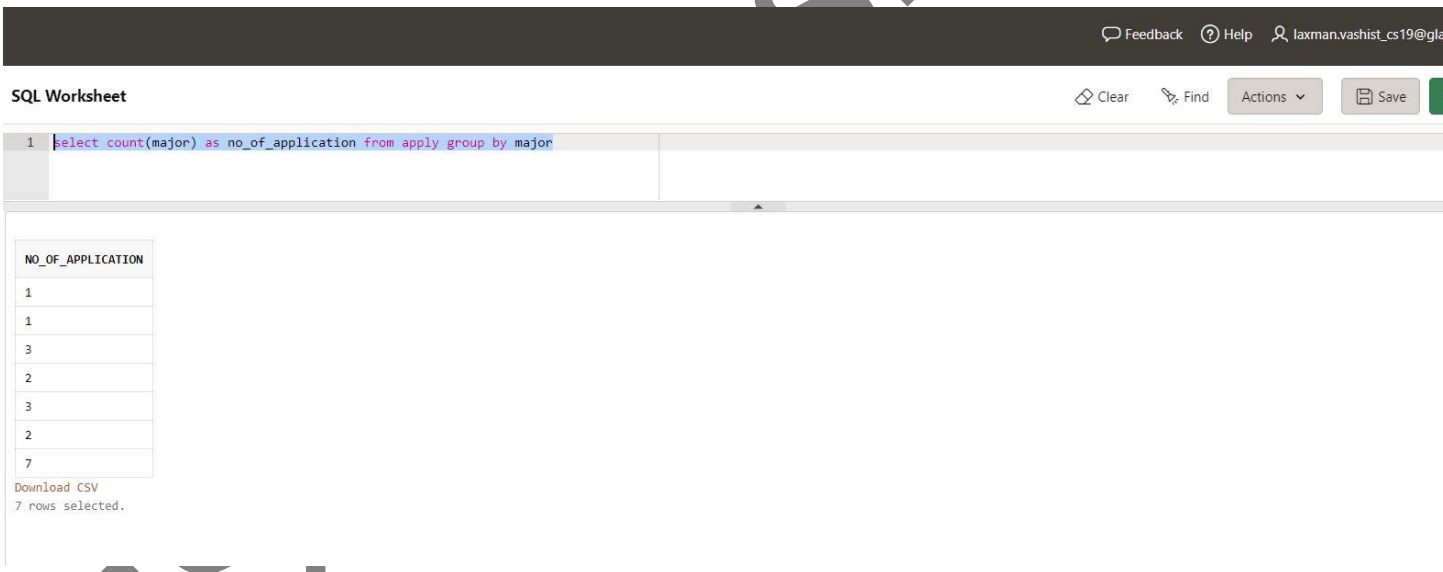
| APPLICATION_REJECTED |
| --- |
| 8 |

Download CSV

**QUS 14 ➔** Find how many students applied to a particular major. (show count(sid) as No_of_applications).

**CODE ➔**

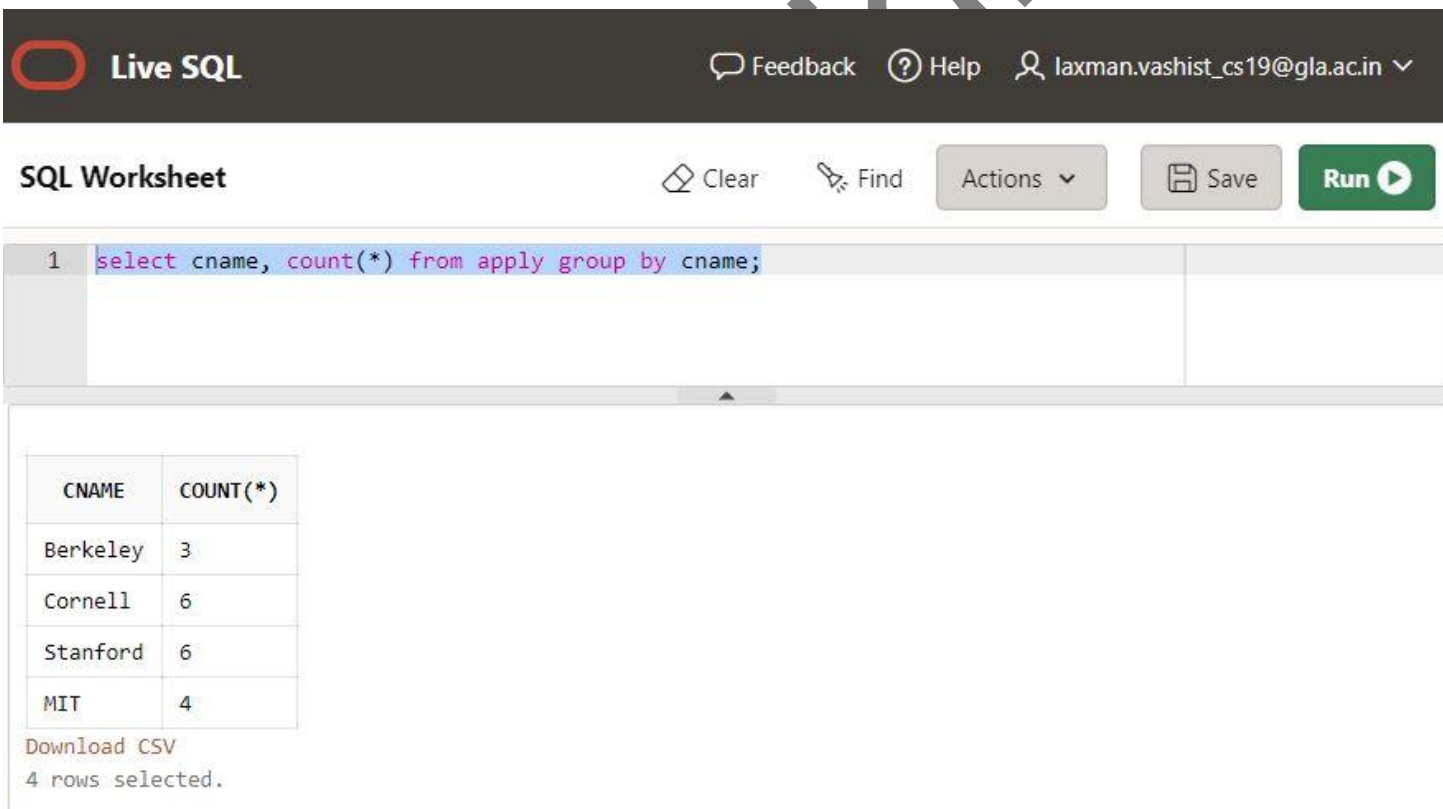
**======**



**Qus 15 ➔** Find number of applications received by particular college.

**CODE➔**

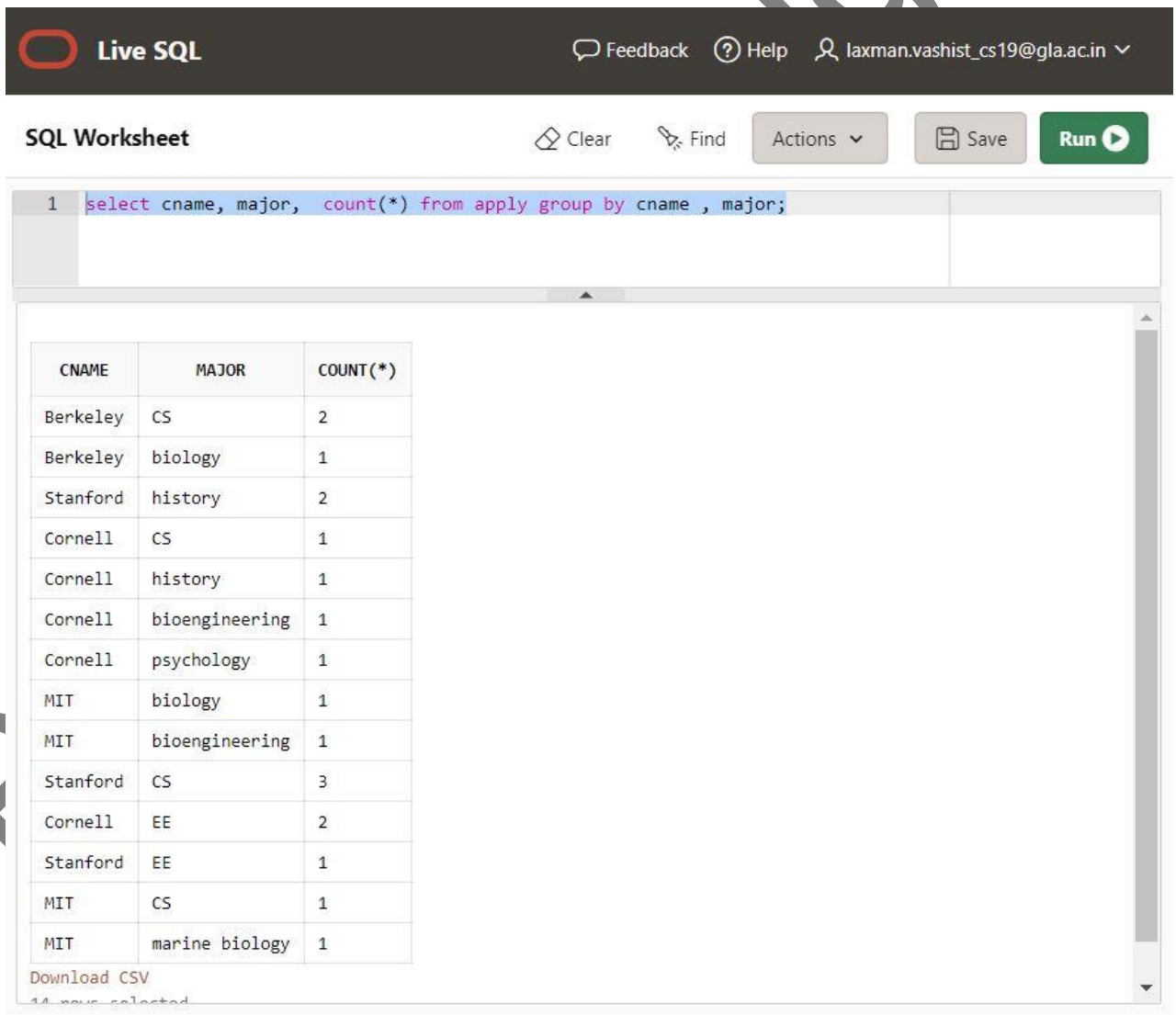
**======**



**Qus 16 ➔** Find number of applications received in a particular major at a particular college.

**CODE➔**

**======**



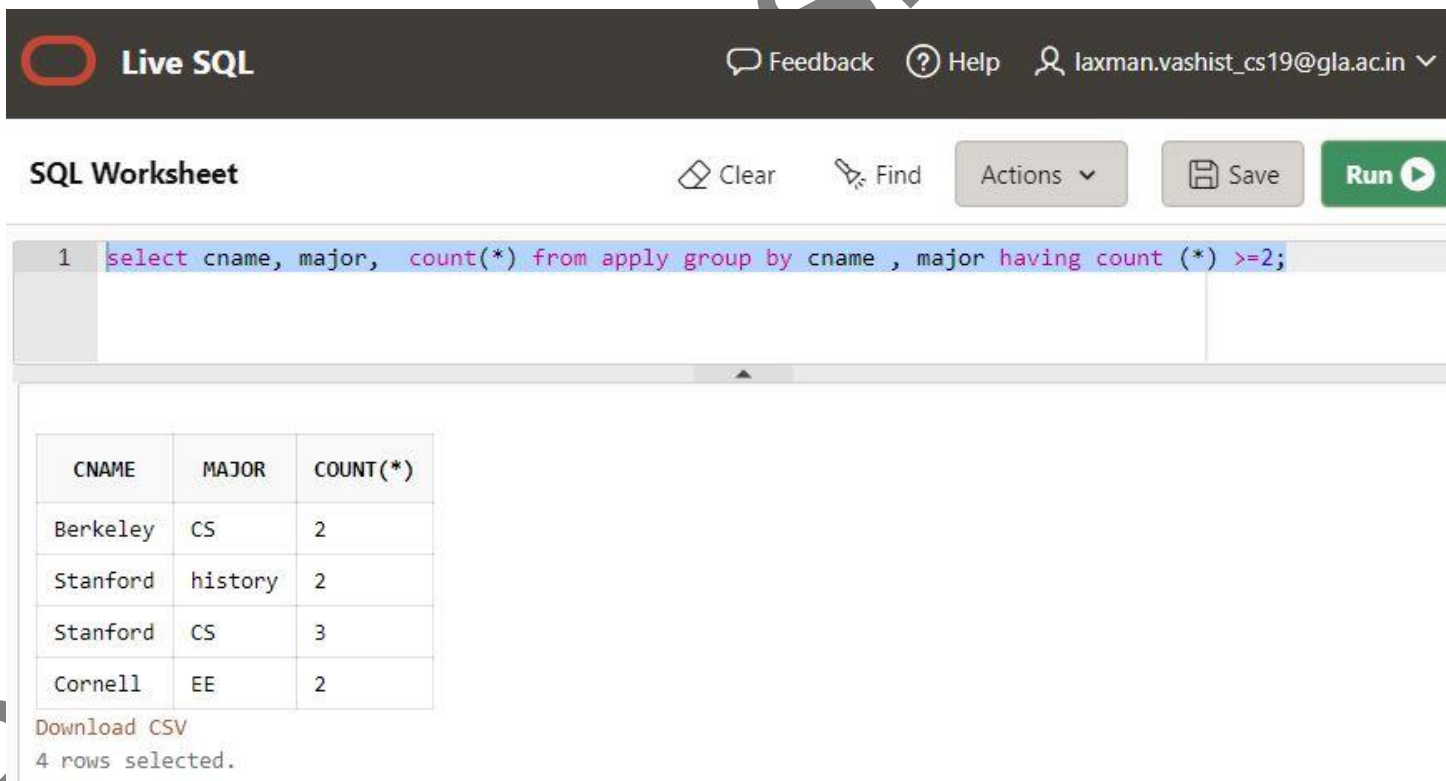

| CNAME | MAJOR | COUNT(*) |
|---|---|---|
| Berkeley | CS | 2 |
| Berkeley | biology | 1 |
| Stanford | history | 2 |
| Cornell | CS | 1 |
| Cornell | history | 1 |
| Cornell | bioengineering | 1 |
| Cornell | psychology | 1 |
| MIT | biology | 1 |
| MIT | bioengineering | 1 |
| Stanford | CS | 3 |
| Cornell | EE | 2 |
| Stanford | EE | 1 |
| MIT | CS | 1 |
| MIT | marine biology | 1 |

Download CSV

**Qus 17 ➔** Give the college name and major, where number of applications received are greater than or equal to 2.

**CODE➔**

**======**



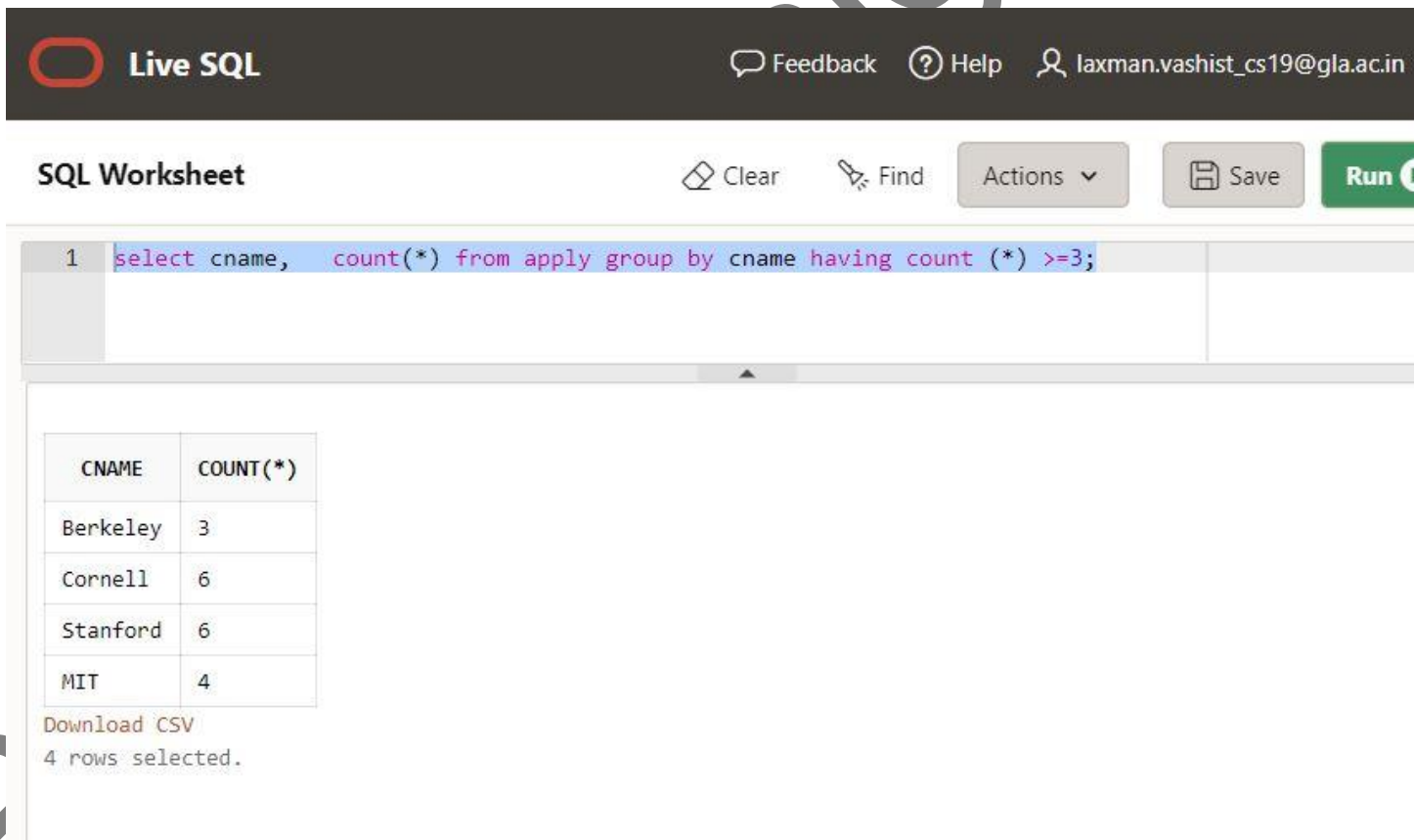

| CNAME | MAJOR | COUNT(*) |
|---|---|---|
| Berkeley | CS | 2 |
| Stanford | history | 2 |
| Stanford | CS | 3 |
| Cornell | EE | 2 |

Download CSV
4 rows selected.

**Qus 18 ➔** Give the name and no of applications of all those colleges which receives applications from 3 or more students.

**CODE➔**

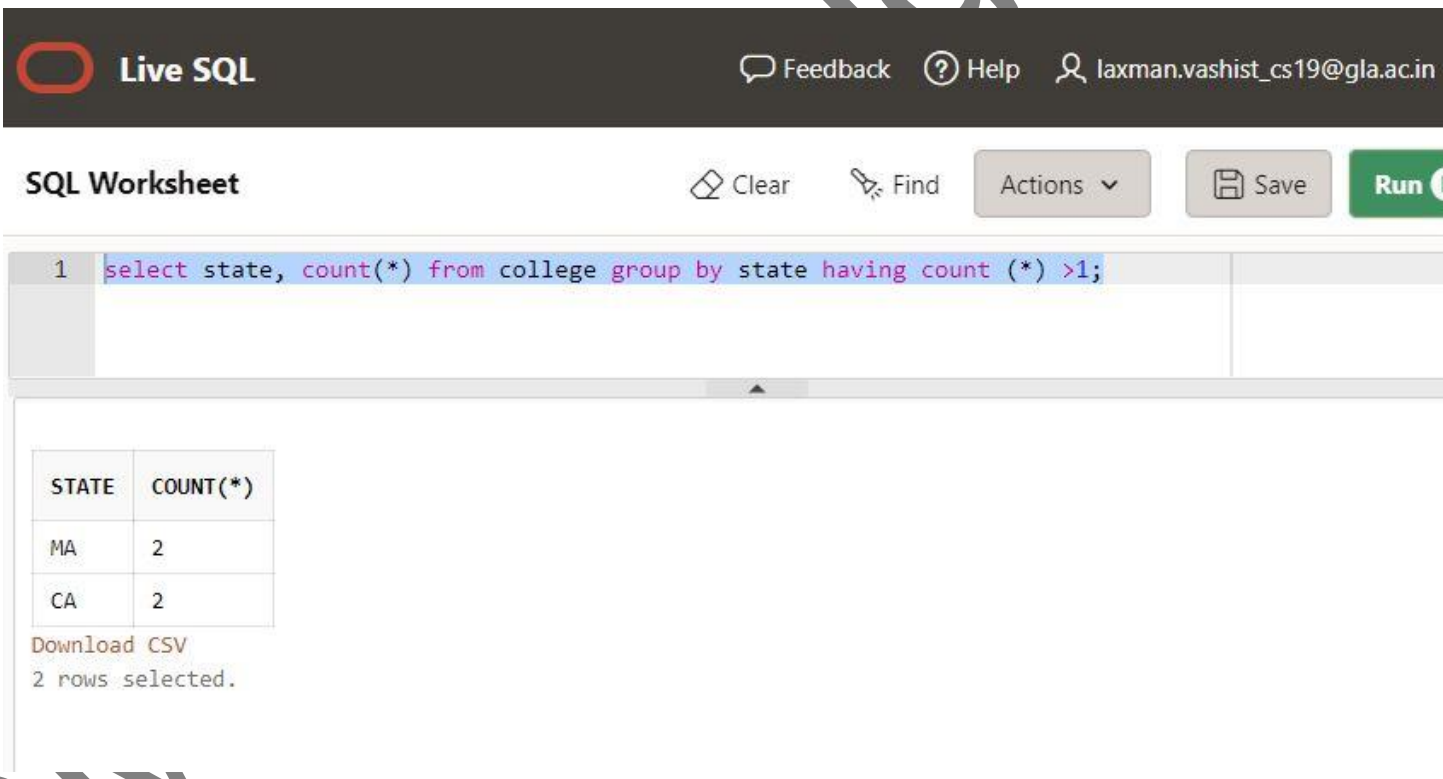
**======**



**Qus 19 ➔** Give state and number of colleges of a state that has more than 1 college.

**CODE➔**

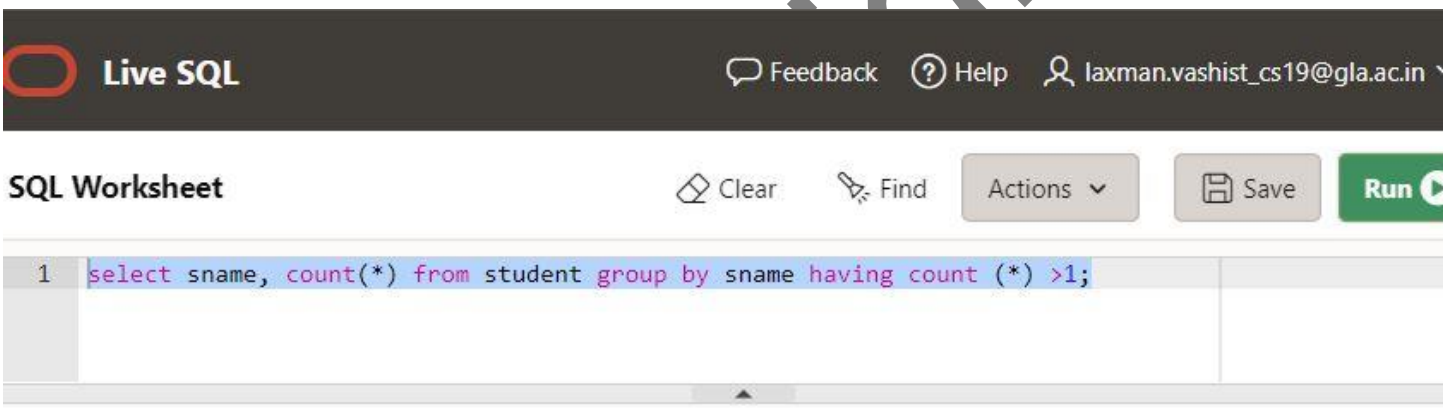
**======**



**QUS 20** ➔ Find the name of students that are duplicate.

**CODE➔**

**======**



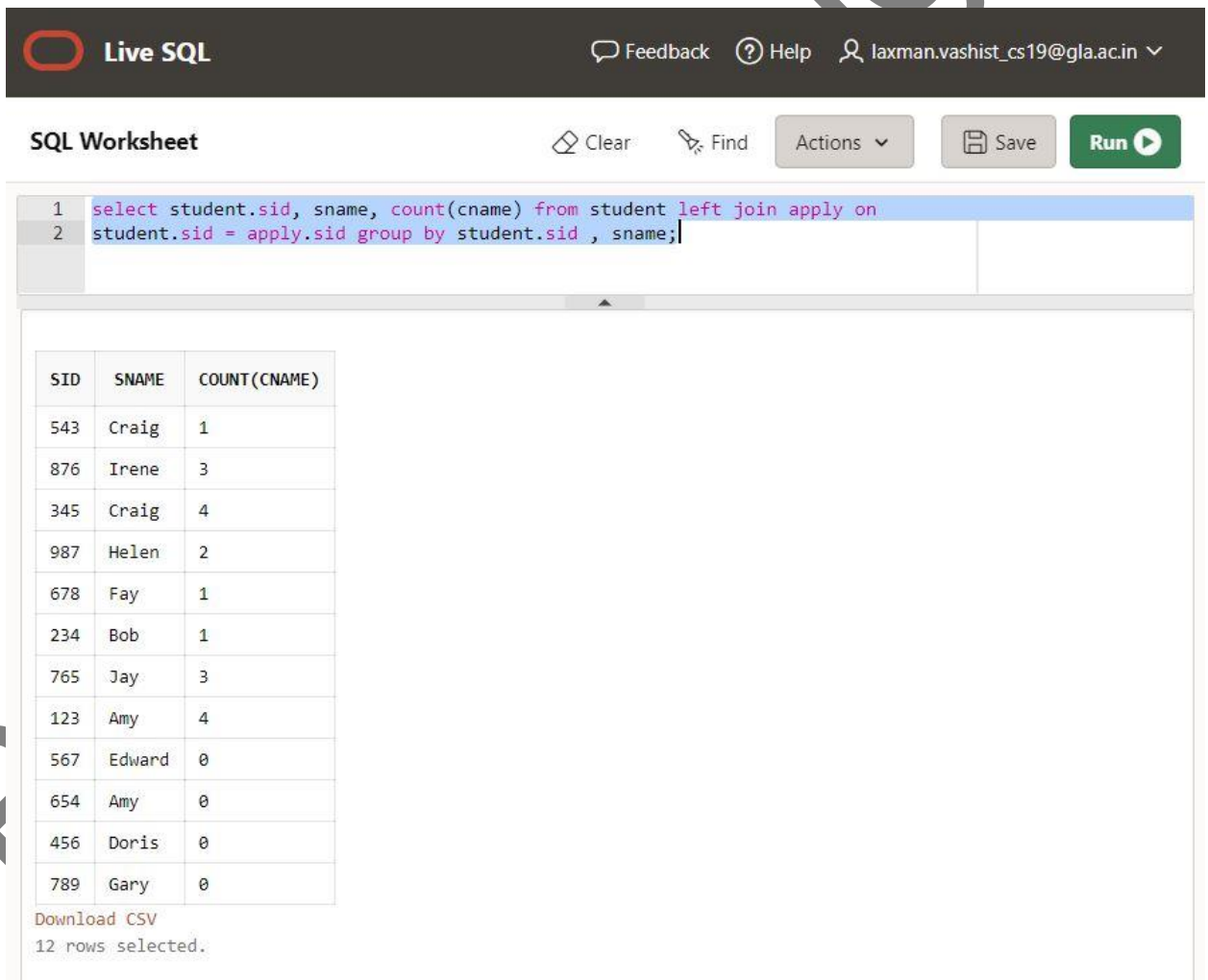

| SNAME | COUNT(*) |
|---|---|
| Amy | 2 |
| Craig | 2 |

Download CSV
2 rows selected.

**QUS 21 ➔** Find how many applications are filed by each student. [Hint: use left join as we need information about all 12 students here. If they applied no where than show zero in front of them].

**CODE➔**

**======**




| SID | SNAME | COUNT(CNAME) |
|---|---|---|
| 543 | Craig | 1 |
| 876 | Irene | 3 |
| 345 | Craig | 4 |
| 987 | Helen | 2 |
| 678 | Fay | 1 |
| 234 | Bob | 1 |
| 765 | Jay | 3 |
| 123 | Amy | 4 |
| 567 | Edward | 0 |
| 654 | Amy | 0 |
| 456 | Doris | 0 |
| 789 | Gary | 0 |

Download CSV
12 rows selected.

**Qus 22 ➔** Provide name of students that file 3 or more applications.

**CODE ➔**

**======**

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SQL Worksheet Clear Find Actions Save Run

```
1  select sname, count(*) from student , apply where
2  student.sid = apply.sid group by sname having count(*) > = 3;
```

| SNAME | COUNT(*) |
|---|---|
| Amy | 4 |
| Craig | 5 |
| Jay | 3 |
| Irene | 3 |

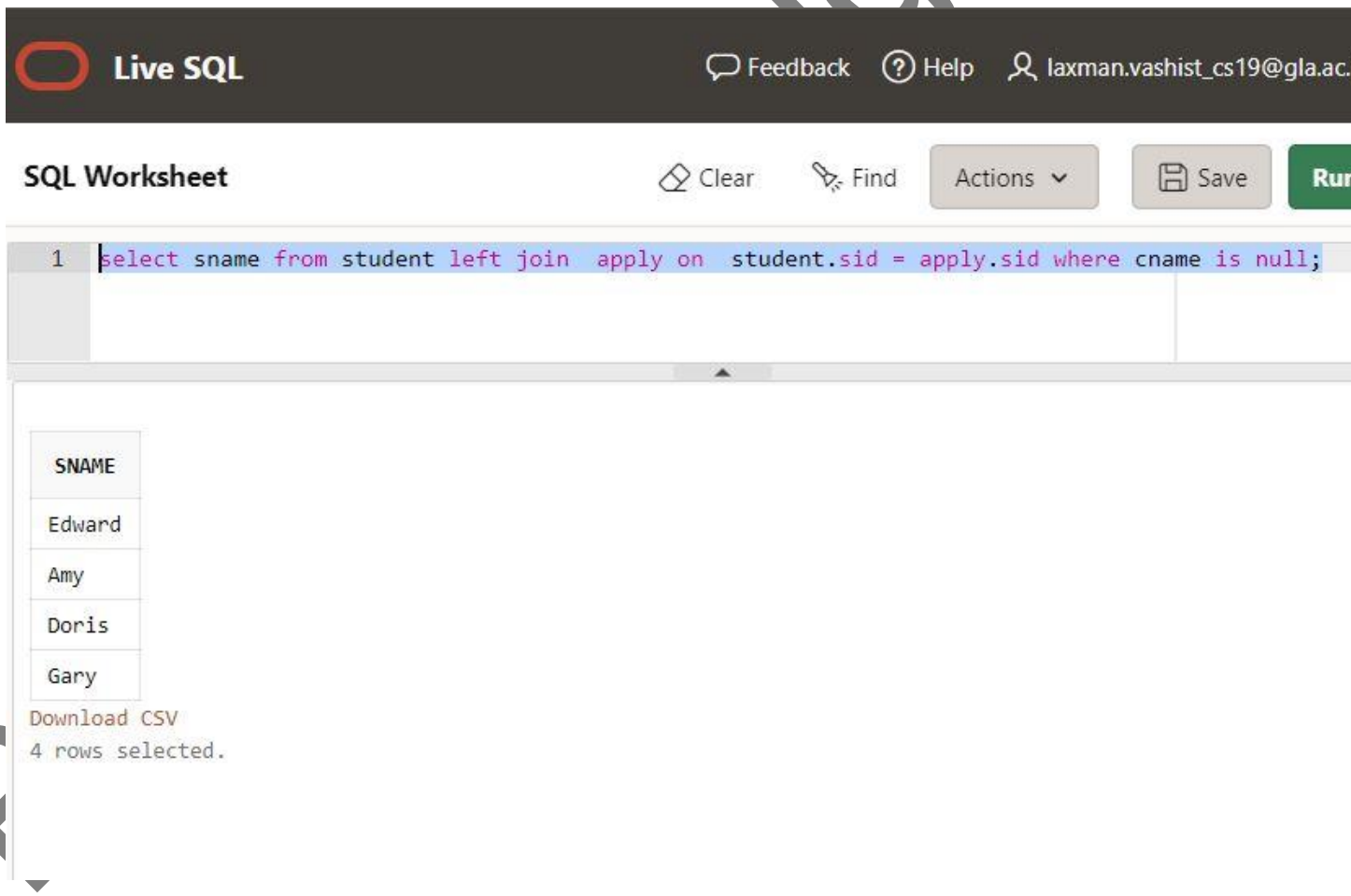
Download CSV

4 rows selected.

**Qus 23 ➔** Provide name of student who have not applied to any college.

**CODE ➔**

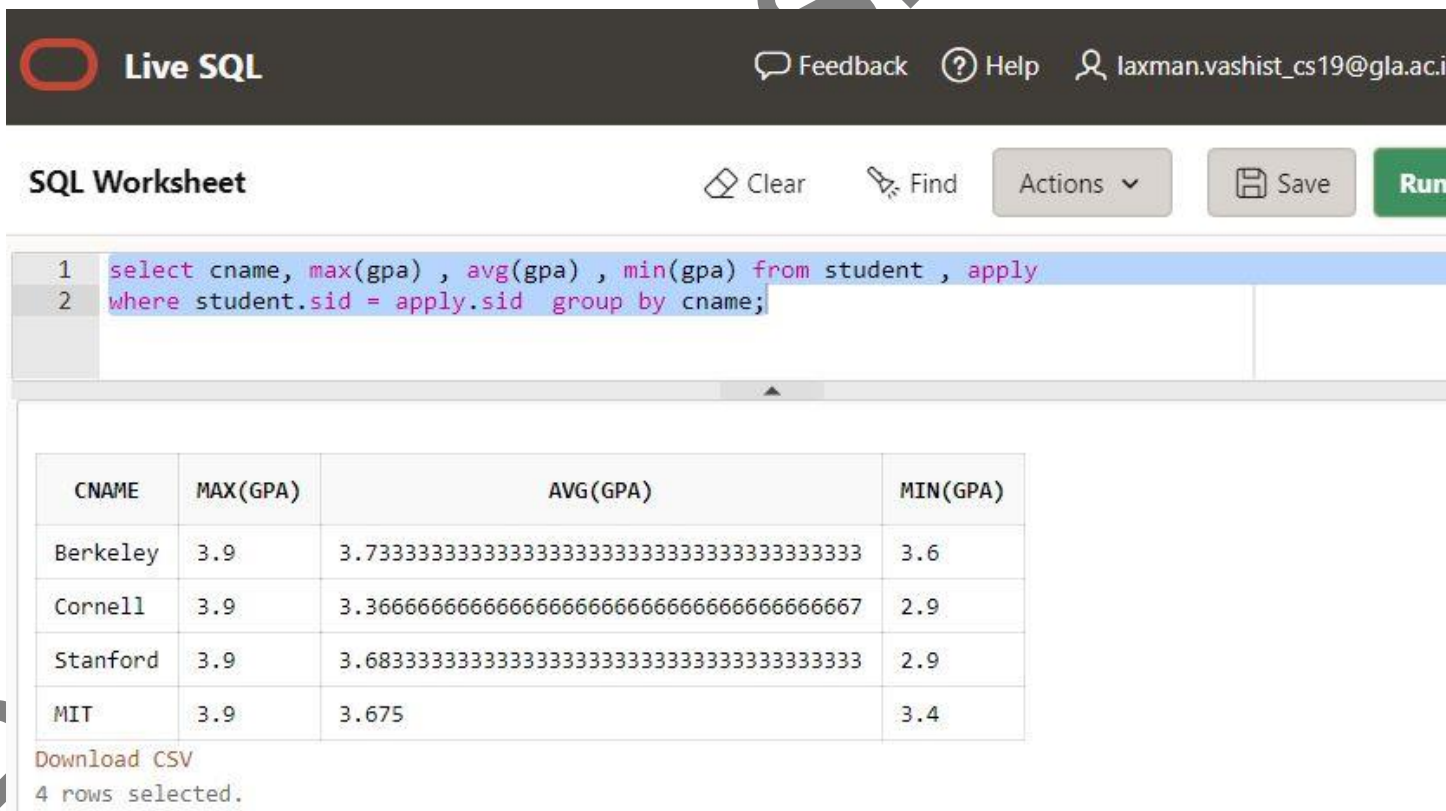
======



**Qus 24 ➔** Find maximum GPA, Average GPA, and minimum GPA among applicants of each college.

**CODE➔**

======




| CNAME | MAX(GPA) | AVG(GPA) | MIN(GPA) |
|---|---|---|---|
| Berkeley | 3.9 | 3.733333333333333333333333333333333333 | 3.6 |
| Cornell | 3.9 | 3.366666666666666666666666666666666667 | 2.9 |
| Stanford | 3.9 | 3.683333333333333333333333333333333333 | 2.9 |
| MIT | 3.9 | 3.675 | 3.4 |

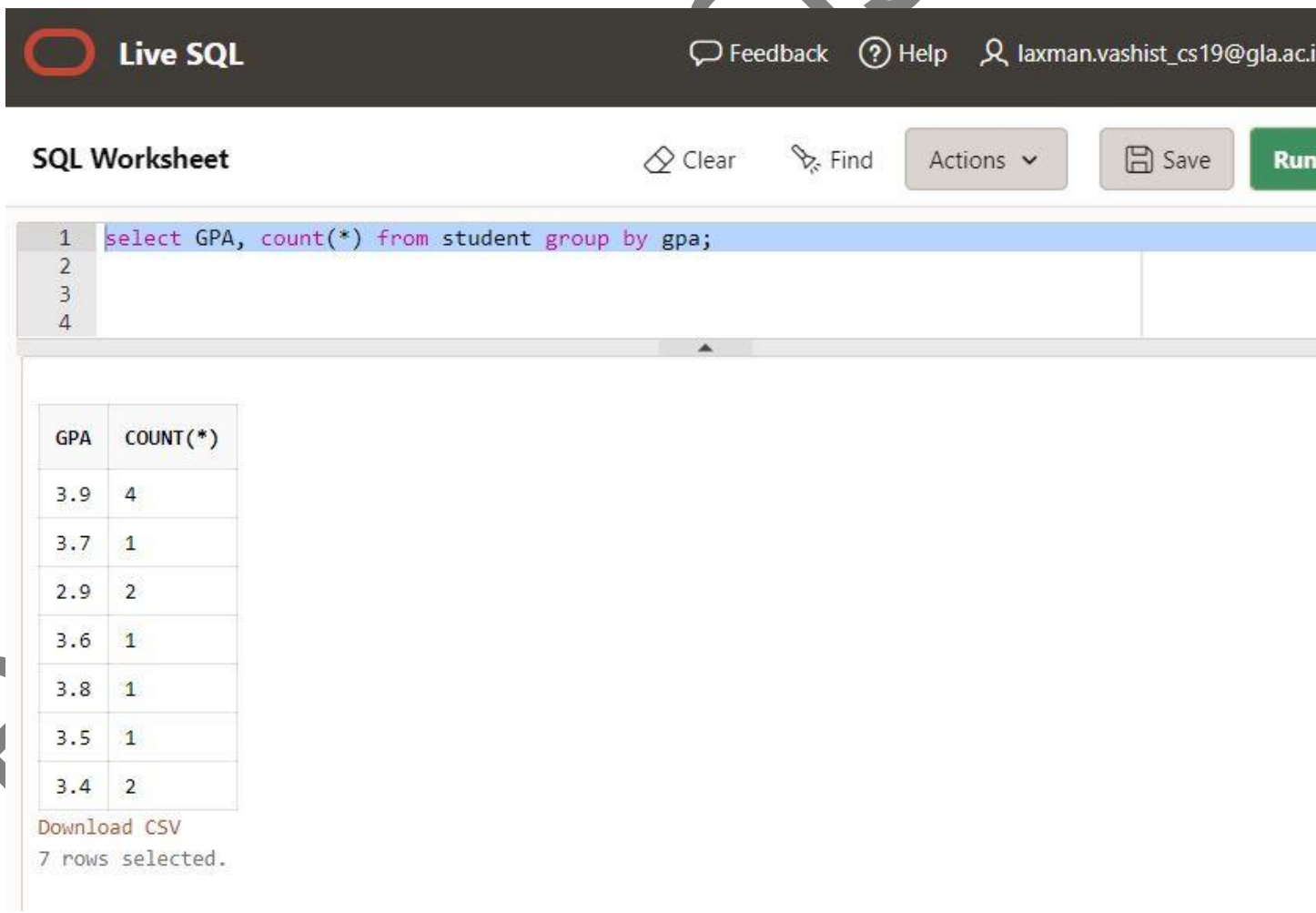
Download CSV

4 rows selected.

**Qus 25 ➔** Find how many student have same GPA among all students. (provide this frequency in two column table as GPA 3.9 is 4 times, GPA 2.9 is 2 times).

**CODE➔**

**======**



**Qus 26 ➔** Find how many student have their name started from A, B or C.

**CODE➔**

**======**

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SQL Worksheet Clear Find Actions Save Run

```
1  select sname, count(*) from student group by sname
2  having sname like 'A%' or sname like 'B%' or sname like 'C%';
```

| SNAME | COUNT(*) |
|---|---|
| Amy | 2 |
| Bob | 1 |
| Craig | 2 |

Download CSV

3 rows selected.

THANK YOU