#### Assignment -4

### Name-Ayush Mittal

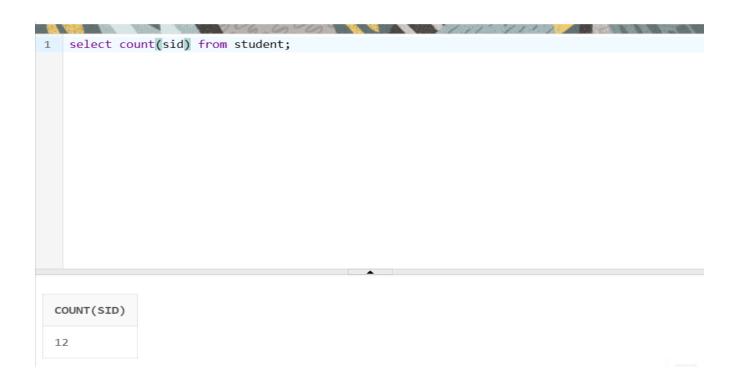
#### Course -B.Tech honours (CSE)

#### <u>Subject-Database Technology</u>

#### University Roll Number-2315800020

## Section-EA

#### Q1. Count the total number of Students.



Q2. Calculate the average GPA of all Student.

Q3. Determine the minimum and maximum GPA. Rename the titles as 'max\_GPA' and 'min\_GPA' respectively.

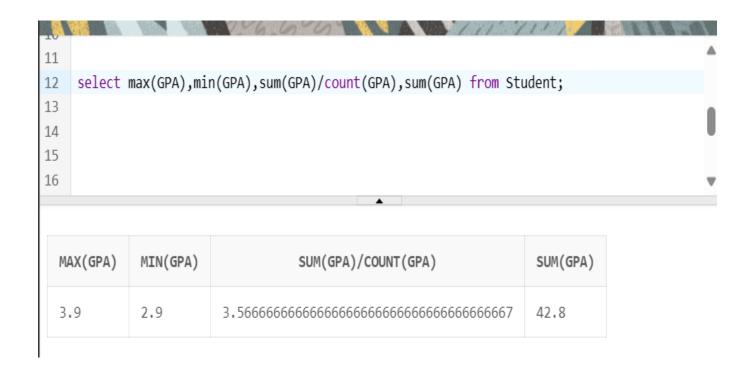


Q4. Count the number of students having GPA greater than or equal to 3.7.

```
select count(GPA) from Student where GPA>=3.7;

10
11
12
12
12
13
```

Q5. Find Maximum, Average, Minimum, total GPA of all student.

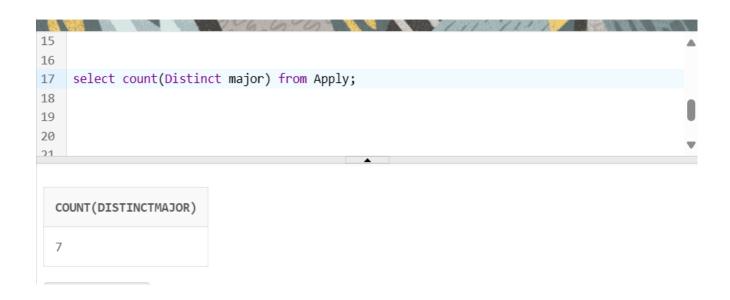


Q6. Find total number of colleges in our Application Database.

```
13
14 select count(Distinct cName) from Apply;
15
16
17
18
19

COUNT(DISTINCTCNAME)
```

Q7. Find how many different majors student had applied in.



Q8. Find total no. of Applications in our Application System's Database.

```
select count(*) from Apply;

count(*)

count(*)

19
```

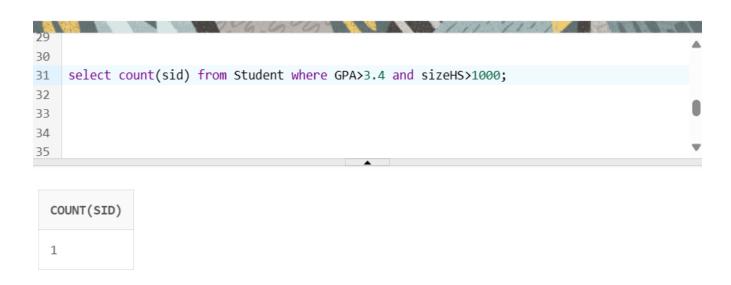
Q9. Find average of all distinct GPA.



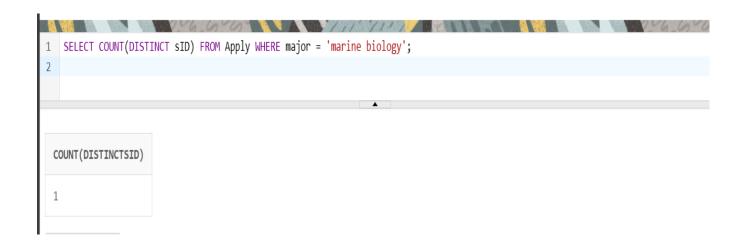
Q10. Display the total number of application accepted.



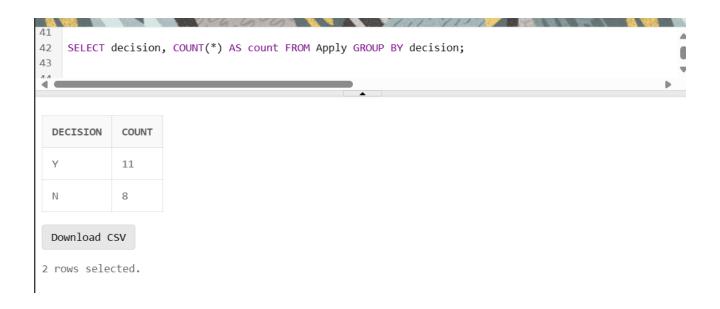
Q11. Find number of students having GPA>3.4 and coming from high school having size>1000.



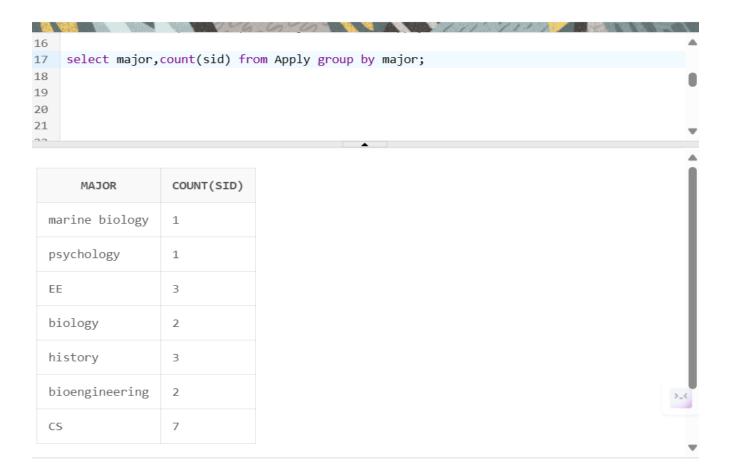
Q12. Find how many student applied to 'marine biology'.



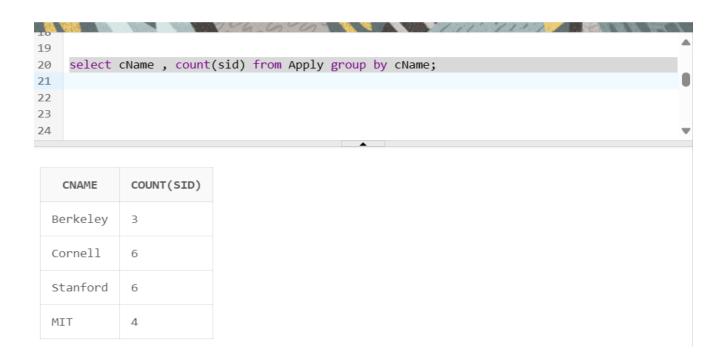
Q13. Find how many applications were rejected and accepted by the colleges.



Q14. Find how many students applied to a particular major. (show count(sid) as No\_of\_applications).



## Q15. Find number of applications received by particular college.



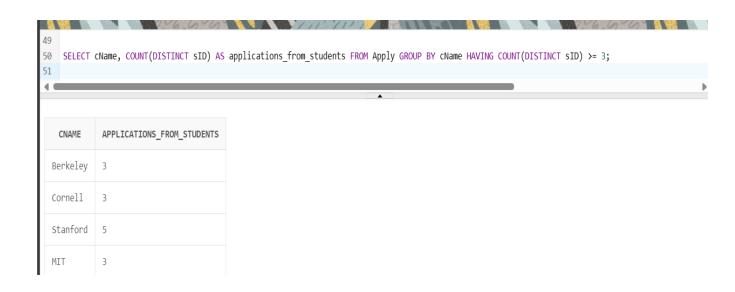
# Q16. Find number of applications received in a particular major at a particular college.



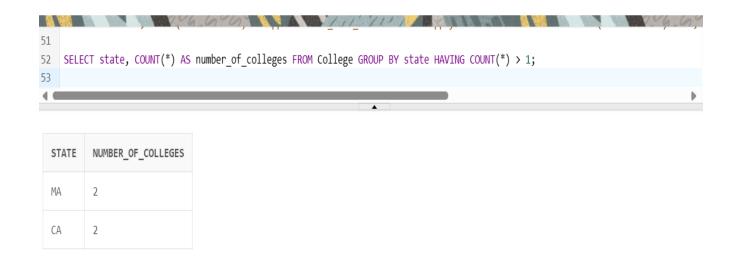
Q17. Give the college name and major, where number of applications received are greater than or equal to 2.



Q18. Give the name and no of applications of all those colleges which receives applications from 3 or more students.



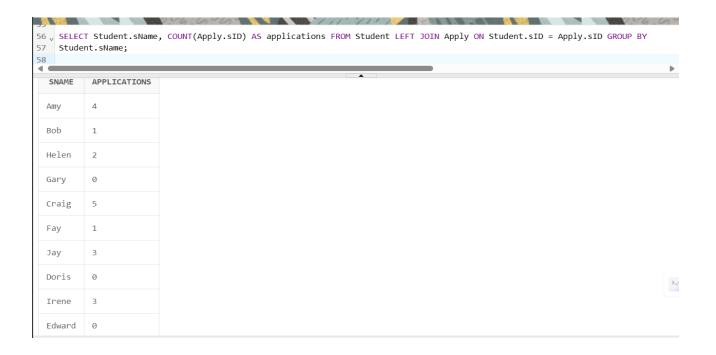
Q19. Give state and number of colleges of a state that has more than 1 college.



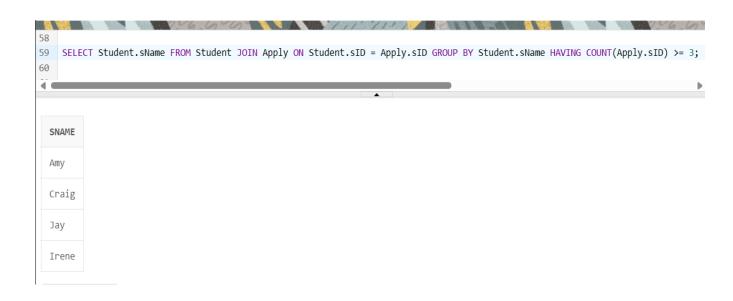
Q20. Find the name of students that are duplicate.



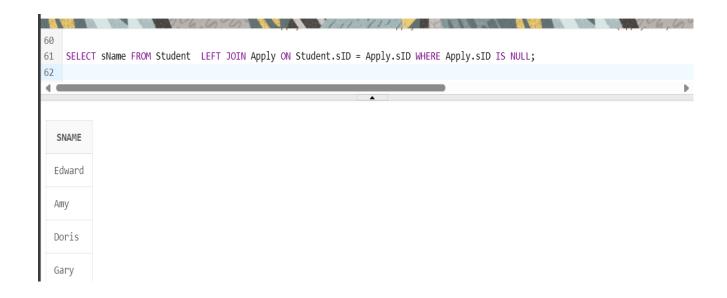
Q21. Find how many applications are filed by each student. [Hint: use left join as we need information about all 12 students here. If they applied nowhere than show zero in front of them].



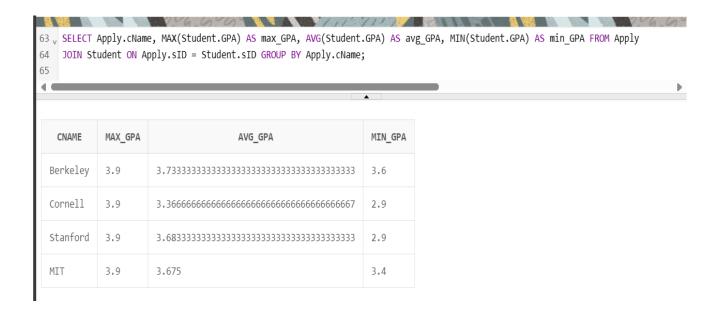
Q22. Provide name of students that file 3 or more applications.



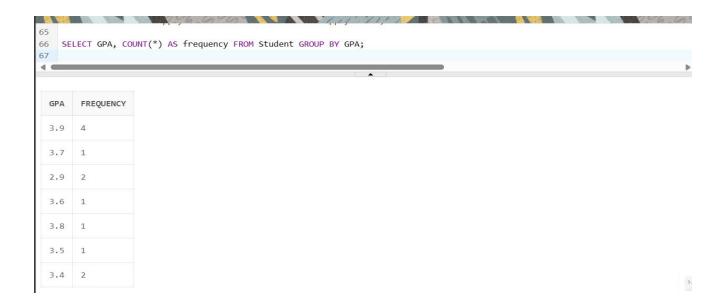
Q23. Provide name of student who have not applied to any college.



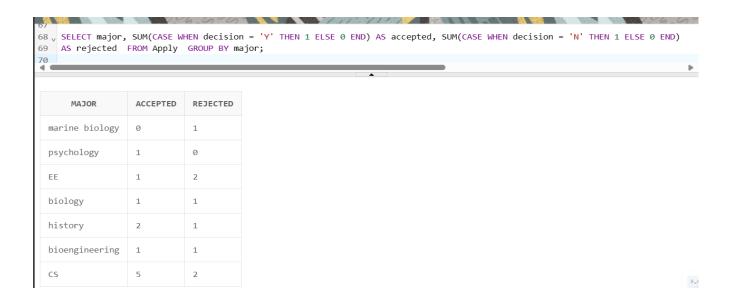
Q24. Find maximum GPA, Average GPA, and minimum GPA among applicants of each college. (i.e. say sID 123, 324 and 987 had applied to Berkley then compute and display max GPA among these three).



Q25. 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).



Q26. Find how many application of each major are rejected and accepted.



Q27. Find out the acceptance rate for each college. (Acceptance Rate is percentage of number application accepted w. r. t. number of application received).

71 V SELECT cName, ROUND((SUM(CASE WHEN decision = 'Y' THEN 1 ELSE 0 END) / COUNT(\*)) \* 100, 2) AS acceptance\_rate
FROM Apply GROUP BY cName;
73

CNAME	ACCEPTANCE_RATE
Berkeley	66.67
Cornell	50
Stanford	66.67
MIT	50