DBMS LAB ASSIGNMENT

SUBJECT CODE: BCSC0802

ASSIGNMENT NO 4

Solve the following:

Q1. Count the total number of Students.

Ans. SELECT COUNT(sName) FROM Student;

COUNT(SNAME)12

Q2. Calculate the average GPA of all Student.

Ans. SELECT AVG(GPA) FROM Student;

Q3. Determine the minimum and maximum GPA. Rename the titles as 'max_GPA' and 'min_GPA' respectively.

Ans. SELECT MIN(GPA) as max_GPA FROM Student;

max_GPA 2.9

SELECT Max(GPA) as min_GPA FROM Student;

min_GPA3.9

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

Ans. SELECT COUNT(GPA) FROM Student WHERE GPA>=3.7;

COUNT(GPA)6

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

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Ans. SELECT MAX(GPA), AVG(GPA), MIN(GPA) FROM Student;

MAX(GPA) AVG(GPA) MIN(GPA)

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

Ans.SELECT COUNT(cName) FROM Apply;

COUNT(CNAME)19

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

Ans. SELECT COUNT(major) FROM Apply;

COUNT(MAJOR)19

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

Ans.SELECT COUNT(sID) FROM Apply;

COUNT(sID)19

Q9. Find average of all distinct GPA.

Ans. SELECT AVG(Distinct GPA) FROM Student;

AVG(DISTINCTGPA)3.54285714285714285714285714285714

Q10. Display the total number of application accepted.

Ans.SELECT COUNT(decision) FROM Apply WHERE decision='Y';

COUNT(DECISION)11

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

Ans. SELECT COUNT(sName) FROM Student WHERE GPA>3.4 AND sizeHS>1000;

COUNT(SNAME)1

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

Ans. SELECT COUNT(major) FROM Apply WHERE major='marine biology';

COUNT(MAJOR)1

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

Ans. SELECT COUNT(decision) FROM Apply WHERE decision='N' AND decision='Y';

COUNT(DECISION)0

Q14. Find how many students applied to a particular major. (show count(sid) asNo_of_applications).

Ans. SELECT COUNT(sID) As No_of_applications FROM Apply;

NO_OF_APPLICATIONS 19

Q15. Find number of applications received by particular college.

Ans. SELECT COUNT(cName) FROM Apply;

COUNT(CNAME)19

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

Ans. SELECT COUNT(major) FROM Apply;

COUNT(MAJOR)19

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

Ans. SELECT COUNT(cName), COUNT(major) FROM Apply WHERE cName>=2;

COUNT(CNAME) COUNT(MAJOR)00

Q21. Find how many applications are filed by each student. [Hint: use left join as we needinformation about all 12 students here. If they applied no where than show zero in

front of them]

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Ans. SELECT Student.sName,Count(Apply.sID)FROM Student Left JOIN Apply ON Student.sID = Apply.sIDGroup By Student.sName; SNAME COUNT(APPLY.SID) Amy 4 Bob 1 Helen 2 Gary 0 Craig 5 Fay 1 Jay 3 Doris 0 Irene 3 Edward 0 Q22. Provide name of students that file 3 or more applications. Ans. SELECT Student.sName,Count(Apply.sID) FROM Student Left JOIN Apply ON Student.sID = Apply.sID Group By Student.sName Having Count(Apply.sID) > 3;

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SNAME COUNT(APPLY.SID)	
Amy 4	
Craig 5	
Q23. Provide name of student who have not applied to any college.	
Ans. SELECT Student.sName FROM Student	
LEFT JOIN Apply	
ON Student.sID = Apply.sID	
WHERE Apply.sID IS NULL	
SNAME	
Edward	
Amy	
Doris	
Gary	
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).	1
Ans. SELECT GPA, COUNT(GPA) AS Frequency	
FROM Student	
GROUP BY GPA	
ORDER BY GPA;	
GPAFREQUENCY	
2.9 2	
3.4 2	
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3.5 1 3.6 1 3.7 1 3.8 1 3.94 **NAME: Kunal Batham UNIVERSITY ROLL NO.: 201500362 SECTION:** A(A2) **ROLL NO.: 33**