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Sub: DBMS Lab
Code: BCSC 0802

Assignment No. 4

Submitted to:

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Exercise 1

1. select count(*) from student;

COUNT(*)
12

2. select AVG(GPA) from student;

AVG(GPA)
3.566666667

3. select MIN(GPA) as max_GPA, MAX(GPA) as max_GPA from student;

MIN_GPA	MAX_GPA
2.9	3.9

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

COUNT(GPA)
6

5. select max(GPA), avg(GPA), min(GPA) from Student;

MAX(GPA)	AVG(GPA)	MIN(GPA)
3.9	3.566666667	2.9

6. select count(*) as num_College from College;

NUM_COLLEGE
5

7. select count(distinct major) from Apply;

COUNT(DISTINCTMAJOR)
7

8. select count(*) as tot_apply from apply;

TOT_APPLY
19

9. select avg(distinct GPA) from Student;

AVG(DISTINCTGPA)
3.542857143

10. select count(decision) from (select decision from apply where decision = 'Y');

COUNT(DECISION)
11

11. select count(sName) from (select sName from Student where GPA>=3.4 and sizeHS >= 1000);

COUNT(GPA)
5

12. select count(sID) from (select sID from Apply where major = 'marine biology');

COUNT(MAJOR)
1

13. select decision, count(decision) from apply group by decision;

DECISION	COUNT(DECISION)
Y	11
N	8

14. select major, count(major) from apply group by major;

MAJOR	NO_OF_APPLICATIONS
marine biology	1
psychology	1
EE	3
biology	2
history	3
bioengineering	2
CS	7

15. select cname, count(cname) from apply group by cname

CNAME	COUNT(CNAME)
Berkeley	3
Cornell	6
Stanford	6
MIT	4

16. select cname, major, count(major) from apply group by (cname,major)

CNAME	MAJOR	COUNT(MAJOR)
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

17. select cname, major, count(major) from apply group by (cname,major) having count(major) >= 2

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

18. select cname, count(cname) from apply group by cname having count(cname) >= 3;

CNAME	COUNT(CNAME)
Berkeley	3
Cornell	6
Stanford	6
MIT	4

19. select state, count(state) from college group by state having count(state) > 1;

STATE	COUNT(STATE)
MA	2
CA	2

20. select sName from student group by sName having count(sName) > 1;

SNAME
Amy
Craig

21. select student.sID, count(Apply.sID) from student left join Apply on Student.sID = Apply.sID group by (Student.sID);

SID	COUNT(APPLY.SID)
543	1
876	3
567	0
345	4
987	2
654	0
678	1
456	0
789	0
234	1
765	3
123	4

22. select sname from student where sId in (select sId from apply group by sId having count(sID) >=3);

SNAME
Amy
Craig
Irene
Jay

23. select sname from student where sID not in (select sID from apply);

SNAME
Edward
Amy
Doris
Gary

24. select cName, Max(GPA), avg(GPA), min(GPA) from student natural join apply group by cName;

CNAME	MAX(GPA)	AVG(GPA)	MIN(GPA)
Berkeley	3.9	3.733333333	3.6
Cornell	3.9	3.366666667	2.9
Stanford	3.9	3.683333333	2.9
MIT	3.9	3.675	3.4

25. select GPA, count(GPA) from student group by GPA;

GPA	COUNT(GPA)
3.9	4
3.7	1
2.9	2
3.6	1
3.8	1
3.5	1
3.4	2

26. select count(sname) from student where sname like 'A%' or sname like 'C%' or sname like 'B%' ;

COUNT(SNAME)
5