Assignment - 8

i. Find the number of student in CSE second year.

SELECT COUNT(NAME) FROM STUDENT2076 WHERE DEPTCODE='CSE' AND
SEMESTER='SEM3';

```
QL> SELECT COUNT(NAME) FROM STUDENT2076 WHERE DEPTCODE='CSE' AND
EMESTER='SEM3';  2

OUNT(NAME)
----------
         4
```

ii. Find the number of students whose marks of any subject is available.

SELECT COUNT(ROLLNO) FROM RESULT2076 WHERE MARKS IS NOT NULL;

```
SQL> SELECT COUNT(ROLLNO) FROM RESULT2076 WHERE MARKS IS NOT NULL;

COUNT(ROLLNO)
-------------
           15
```

iii. Find total number of faculty.

SELECT COUNT(*) AS Total_Faculty FROM FACULTY2076;

```
SQL> SELECT COUNT(*) AS Total_Faculty FROM FACULTY2076;

TOTAL_FACULTY
-------------
           10
```

iv. Find the 5th semester student(s) who got maximum marks in a subject.

SELECT DISTINCT NAME,MARKS,SUB_CODE FROM STUDENT2076 FULL OUTER JOIN
RESULT2076 ON STUDENT2076.ROLLNO=RESULT2076.ROLLNO
WHERE SEMESTER IN('Sem5','SEM5') AND MARKS IN (SELECT MAX(MARKS) FROM
RESULT2076 GROUP BY SUB_CODE);

```
NAME                      MARKS SUB_CODE
--------------------  --------- --------
PARIMAL KUMAR                91 CS501
ASHISH KUMAR                 77 EC501
PARIMAL KUMAR                82 CS502
ANANYA BISWAS                72 ECS501
```

v. Find the roll number of a student who got maximum marks in CS501.

SELECT ROLLNO FROM RESULT2076 WHERE MARKS=(SELECT MAX(MARKS) FROM RESULT2076 WHERE SUB_CODE = 'CS501');

```
    ROLLNO
----------
      1003
```

vi. Display average marks of CS502.

SELECT AVG(MARKS) FROM RESULT2076 WHERE SUB_CODE='CS502';

```
SQL> SELECT AVG(MARKS) FROM RESULT2076 WHERE SUB_CODE='CS502';

AVG(MARKS)
----------
67.6666667
```

vii. Find the number of students in each department with their department code.

SELECT DEPTCODE,COUNT (ROLLNO) FROM STUDENT2076 GROUP BY DEPTCODE;

```
DEPT COUNT(ROLLNO)
---- -------------
IT                2
EE                2
CSE              11
ECE               5
```

viii. Find the number of students in each department with their department name.

SELECT D.DEPTNAME, COUNT(S.DEPTCODE) AS NumOfStudents FROM DEPARTMENT2076 D LEFT JOIN STUDENT2076 S ON D.DEPTCODE = S.DEPTCODE GROUP BY D.DEPTNAME;

```
SQL> SELECT D.DEPTNAME, COUNT(S.DEPTCODE) AS NumOfStudents FROM DEPARTMENT2076 D LEFT JOIN STUDENT2076 S ON D.DEPTCODE = S.DEPTCODE GROUP BY D.DEPTNAME;

DEPTNAME                                NUMOFSTUDENTS
--------------------------------------- ------------
Electronics and Communication Engineering          5
Information Technology                             2
Electrical Engineering                             2
Computer Science and Engineering                  11
```

ix. Find the Department with more than three faculty.

SELECT d.DEPTCODE, d.DEPTNAME FROM DEPARTMENT2076 d WHERE d.DeptCode IN (SELECT s.DeptCode FROM SUBJECT2076 s GROUP BY s.DeptCode HAVING COUNT(s.TEACHER)>3);

```
DEPT DEPTNAME
---- ------------------------------------------------
CSE  Computer Science and Engineering
```

x. Find the student name and roll no who get more than 80 in at least two subject.

SELECT r.ROLLNO, s.NAME FROM RESULT2076 r

JOIN STUDENT2076 s ON r.ROLLNO = s.ROLLNO WHERE r.MARKS > 80 AND (SELECT

COUNT(*) FROM Result2076 r1 WHERE r1.ROLLNO = r.ROLLNO

AND r1.MARKS > 80) >= 2;

```
    ROLLNO NAME
---------- --------------------
      1003 PARIMAL KUMAR
      1003 PARIMAL KUMAR
```

xi. Find the student name and roll no who get more than 70 in average.

SELECT s.NAME, r.ROLLNO FROM RESULT2076 r JOIN STUDENT2076 s ON r.ROLLNO =

s.ROLLNO GROUP BY s.NAME, r.ROLLNO HAVING AVG(r.MARKS) > 70;

```
NAME                          ROLLNO
--------------------      ----------
MOINAK GHOSH                    1002
NAITIK PRASAD                   1029
ANANYA BISWAS                   2002
SAMPRIKTA BISWAS                1023
ASHISH KUMAR                    2101
PARIMAL KUMAR                   1003

6 rows selected.
```

xii. Display number of subject semester wise in dept CSE.

SELECT SEMESTER, COUNT(*) AS Number_of_Subjects FROM SUBJECT2076 WHERE

DEPTCODE = 'CSE' GROUP BY SEMESTER;

```
SQL> SELECT SEMESTER, COUNT(*) AS Number_of_Subjects FROM SUBJECT2076 WHERE
DEPTCODE = 'CSE' GROUP BY SEMESTER;  2

SEME NUMBER_OF_SUBJECTS
---- -----------------
SEM5                 3
SEM3                 2
```

xiii. Find the department name with maximum number of student.

SELECT DEPTNAME FROM DEPARTMENT2076 WHERE STUDENT_ALLOTED=(SELECT

MAX(STUDENT_ALLOTED)FROM DEPARTMENT2076);

```
SQL> SELECT DEPTNAME FROM DEPARTMENT2076 WHERE STUDENT_ALLOTED=(SELECT
MAX(STUDENT_ALLOTED)FROM DEPARTMENT2076);  2

DEPTNAME
------------------------------------------------
Computer Science and Engineering
```

xiv. Find the second highest marks of the result table.

SELECT MAX(MARKS) AS SecondHighestMarks FROM RESULT2076 WHERE MARKS <

(SELECT MAX(MARKS) FROM RESULT2076);

```
SECONDHIGHESTMARKS
------------------
                91
```

xv. Find the students name who got highest marks, subjectwise.

SELECT DISTINCT NAME,MARKS,SUB_CODE FROM STUDENT2076 FULL OUTER JOIN

RESULT2076 ON STUDENT2076.ROLLNO=RESULT2076.ROLLNO WHERE MARKS IN (SELECT

MAX(MARKS)FROM RESULT2076 GROUP BY SUB_CODE);

```
SQL> SELECT DISTINCT NAME,MARKS,SUB_CODE FROM STUDENT2076 FULL OUTER JOIN
RESULT2076 ON STUDENT2076.ROLLNO=RESULT2076.ROLLNO WHERE MARKS IN (SELECT
MAX(MARKS)FROM RESULT2076 GROUP BY SUB_CODE);  2    3

NAME                       MARKS SUB_CODE
------------------- ---------- --------
PARIMAL KUMAR                  91 CS501
SAMPRIKTA BISWAS               92 CS301
ASHISH KUMAR                   77 EC501
PARIMAL KUMAR                  82 CS502
SAMPRIKTA BISWAS               80 CS302
ANANYA BISWAS                  72 ECS501
```