SQL Assignment

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Schema:

Student:
(s_id, s_name, s_dob, s_year)

Professor:
(e_id, e_name, c_id)

Course:
(c_id, c_name, c_duration)

StudentCourse:
(s_id, c_id)

SQL statements:

1.
```
CREATE TABLE `test`.`student` (
s_id integer primary key,
s_name varchar(50),
s_dob date,
s_year integer
);
```

2.
```
CREATE TABLE `test`.`course` (
c_id integer primary key,
c_name varchar(50),
c_duration integer
);
```

3.
```
CREATE TABLE `test`.`professor` (
e_id integer primary key,
e_name varchar(50),
c_id integer references course.c_id
);
```

4. CREATE TABLE `test`.`stdcourse` (
s_id integer references student.s_id,
c_id integer references course.c_id
);

Data:

Course:

c_id	c_name	c_duration
1	Data structures	1
2	Algorithms	1
3	Java	1
4	DBMS	1
5	Embedded systems	1

Student:

s_id	s_name	s_dob	s_year
1	Abhinav	1997-11-07	4
2	Nitin	1997-10-07	4
3	Nikhitha	1998-04-08	4
4	Smaran	1998-04-11	4
5	Rochan	1997-05-11	4
6	Prashant	1997-06-02	3
7	Prasad	1998-06-02	3
8	Alok	1998-06-11	3

9	Kushal	1998-10-11	3
10	Harish	1998-08-11	3

Professor:

e_id	e_name	c_id
1	Joseph	1
2	Hanish	2
3	Vishal	3
4	Abhivardhan	4
5	Sushanth	5

stdCourse:

s_id	c_id
1	1
1	2
2	1
2	3
2	4
3	1
4	2
..	..

Results:

1 **Query 1**: select s.s_id,s.s_name, c.c_name from student s, course c, stdcourse sc where s.s_id = sc.s_id and c.c_id = sc.c_id group by(s.s_id);

Output:

1	Abhinav	Data structures
2	Nitin	Data structures
3	Nikhitha	Data structures
4	Smaran	Algorithms
5	Rochan	Algorithms
6	Prashanth	Embedded systems
7	Prasad	Data structures
8	Alok	Java
9	Kushal	Algorithms
10	Harish	Data structures

2 **Query 2**:

```
select  c.c_name, p.e_name, max(countC) "no of enrollments" from
(
        select  sc.c_id,count(sc.c_id) "countC" from stdcourse sc group by(sc.c_id)
) as t, professor p,course c
where p.c_id = t.c_id and c.c_id = t.c_id;
```

Output:

C_name	e_name	no of enrollments
Data structures	Joseph	7

3 Procedure:

```
CREATE DEFINER=`root`@`localhost` PROCEDURE `profList`
(s_id  integer)
BEGIN
        if exists (select s.s_id from student s where s.s_id = s_id) then
                select sc.c_id,c.c_name, p.e_name from
                stdcourse sc, professor p, course c
                where sc.s_id = s_id and sc.c_id = p.c_id and sc.c_id =
                c.c_id;
         else
                dbms_output.put_line('student doesnt exists');
        end if;
END
```

Output:

call profList(1);

c_id	c_name	e_name
1	Data Structures	Joseph
2	Algorithms	Hanish