

## Experiment 6

## Subqueries

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CSE A2

I. Suppliers(sid:integer, sname:string, city:string, street:string)  
Parts(pid:integer, pname:string, color:string)  
Catalog(sid:integer, pid:integer, cost:real)

- Write a query retrieves the name (sname) of suppliers, who have supplied a non-blue part.

Query - **SELECT S.sname FROM Suppliers S WHERE S.sid NOT IN (SELECT C.sid FROM Catalog C WHERE C.pid NOT IN (SELECT P.pid FROM Parts P WHERE P.color <> 'blue'));**

II. Consider the following relations:

Student	
Roll_No	Student_Name
1	Raj
2	Rohit
3	Raj

Performance		
Roll_No	Course	Marks
1	Math	80
1	English	70
2	Math	75
3	English	80
2	Physics	65
3	Math	80

- Write a query to find the sum of marks for each student.

Query - **select P.Roll\_No, sum(P.Marks) as Total\_Marks from student s, Performance P where s.Roll\_No=P.Roll\_No group by P.Roll\_No;**

```
SQL> select * from student;

  ROLL_NO STUDENT
  -----
      1 Raj
      2 Rohit
      3 Raj

SQL> select * from Performance;

  ROLL_NO COURSE   MARKS
  -----
      1 Math       80
      1 English    70
      2 Math       75
      3 English    80
      2 Physics    65
      3 Math       80

6 rows selected.
```

```
SQL> select P.Roll_No, sum(P.Marks) as Total_Marks from student s, Performance P where s.Roll_No=P.Roll_No group by P.Roll_No;
```

ROLL_NO	TOTAL_MARKS
1	150
2	140
3	160

III. Passenger (pid, pname, age)  
Reservation (pid, class, tid)

**Table: Passenger**

pid	pname	age
0	Sachin	65
1	Rahul	66
2	Sourav	67
3	Anil	69

**Table : Reservation**

pid	class	tid
0	AC	8200
1	AC	8201
2	SC	8201
5	AC	8203
1	SC	8204
3	AC	8202

- Write a query to find the passengers who have done registration and also who have age greater than 65 who are travelling in “AC” class.

Query - select distinct(P.pname) from Passenger P, Reservation R where P.age>65 and R.class='AC' and P.pid=R.pid;

```
SQL> select * from Passenger;
```

PID	PNAME	AGE
0	Sachin	65
1	rahul	66
2	Sourav	67
3	Anil	69

```
SQL> select * from Reservation;
```

PID	CL	TID
0	AC	8200
1	AC	8201
2	SC	8201
5	AC	8203
1	SC	8204
3	AC	8202

6 rows selected.

```
SQL> select distinct(P.pname) from Passenger P, Reservation R where P.age>65 and R.class='AC' and P.pid=R.pid;
```

PNAME
rahul
Anil

```
SQL> _
```