

OUTPUTS

1

INPUT TABLE:-

```
SQL Shell (psql)
postgres=# SELECT * FROM employee;
 empid | address |   doj   | salary | empname
-----+-----+-----+-----+-----
      1 | Muscat  | 2010-03-21 |    2000 | Jeremiah
      2 | Bangkok | 2014-03-21 |   10000 | Smith
      3 | New York | 2014-08-21 |   12000 | Kumar
(3 rows)

postgres=# SELECT * FROM project;
 projectno | projectname | duration
-----+-----+-----
          1 | AI/ML       |         7
          2 | Data Science |         8
          3 | Chemistry   |         4
(3 rows)

postgres=# SELECT * FROM workson;
 empid | projectno
-----+-----
      2 |         1
      1 |         3
      3 |         1
(3 rows)

postgres=#
```

COMMANDS:-

```
SQL Shell (psql)
postgres=# SELECT * FROM employee ORDER BY empname DESC;
 empid | address |   doj   | salary | empname
-----+-----+-----+-----+-----
      2 | Bangkok | 2014-03-21 |   10000 | Smith
      3 | New York | 2014-08-21 |   12000 | Kumar
      1 | Muscat  | 2010-03-21 |    2000 | Jeremiah
(3 rows)

postgres=# SELECT * FROM project WHERE projectno=2;
 projectno | projectname | duration
-----+-----+-----
          2 | Data Science |         8
(1 row)

postgres=# SELECT empname FROM employee WHERE empname LIKE 'b%' OR empname LIKE 'B%';
 empname
-----
(0 rows)

postgres=# SELECT empid FROM workson WHERE projectno=3;
 empid
-----
      1
(1 row)

postgres=#
```

2.

INPUT TABLE:-

SQL Shell (psql)

```
postgres=# SELECT * FROM student;
```

| rollno | name | m1 | m2 | m3 | m4 | m5 | m6 | total |
|--------|----------|----|----|----|----|----|----|-------|
| 2 | singh | 5 | 5 | 5 | 5 | 5 | 5 | 30 |
| 3 | jonathan | 5 | 7 | 5 | 5 | 6 | 5 | 33 |
| 5 | ramesh | 7 | 7 | 5 | 5 | 6 | 9 | 40 |
| 6 | kevin | 7 | 7 | 5 | 8 | 6 | 9 | 43 |
| 7 | mustafa | 8 | 7 | 5 | 8 | 6 | 9 | 44 |
| 8 | ali | 8 | 7 | 5 | 8 | 6 | 10 | 45 |
| 9 | govind | 8 | 7 | 5 | 8 | 6 | 15 | 50 |
| 10 | linda | 8 | 7 | 5 | 8 | 10 | 15 | 52 |
| 4 | ramkumar | 6 | 7 | 5 | 5 | 6 | 9 | 30 |
| 1 | mamooty | 8 | 9 | 8 | 7 | 6 | 6 | 44 |

(10 rows)

```
postgres=# SELECT * FROM department;
```

| deptid | deptname | hodname |
|--------|----------|---------------|
| 1 | cse | Mrs. Rajeshri |
| 2 | mech | Mrs. Lakshmi |
| 3 | civil | Mr. John |

(3 rows)

Select SQL Shell (psql)

```
postgres=# SELECT * FROM studep;
```

| rollno | deptid |
|--------|--------|
| 1 | 3 |
| 2 | 3 |
| 3 | 2 |
| 4 | 1 |
| 5 | 2 |
| 6 | 3 |
| 7 | 1 |
| 8 | 2 |
| 9 | 1 |
| 10 | 2 |

(10 rows)

COMMANDS:-

SQL Shell (psql)

```
postgres=# SELECT S.rollno, S.name, S.m1, S.m2, S.m3, S.m4, S.m5, S.m6, S.total FROM student AS S, department, studep WHERE studep.deptid=3 AND studep.rollno=S.rollno AND department.deptid = studep.deptid;
```

| rollno | name | m1 | m2 | m3 | m4 | m5 | m6 | total |
|--------|---------|----|----|----|----|----|----|-------|
| 2 | singh | 5 | 5 | 5 | 5 | 5 | 5 | 30 |
| 6 | Kevin | 7 | 7 | 5 | 8 | 6 | 9 | 43 |
| 1 | mamooty | 8 | 9 | 8 | 7 | 6 | 6 | 44 |

(3 rows)

```
postgres=# SELECT D.deptid, D.deptname, D.hodname FROM department AS D, studep, student WHERE studep.rollno = 2 AND studep.rollno= student.rollno AND D.deptid=studep.deptid;
```

| deptid | deptname | hodname |
|--------|----------|----------|
| 3 | civil | Mr. John |

(1 row)

```
postgres=# SELECT name from student WHERE total >500 ;
```

| name |
|------|
|------|

(0 rows)

```
postgres=# SELECT hodname FROM department WHERE deptname='cse';
```

| hodname |
|---------------|
| Mrs. Rajeshri |

(1 row)

```
postgres=# SELECT student.rollno FROM student, department, studep WHERE student.rollno = studep.rollno AND department.deptid = studep.deptid AND department.deptname='cse';
```

| rollno |
|--------|
| 4 |
| 7 |
| 9 |

3.

INPUT TABLE:-

```
SQL Shell (psql)
postgres=# select * from salesperson;
-----
 ssn | name      | start_year | dept_no
-----+-----+-----+-----
 1000 | Kobe Bryant | 2020      | 1
 1200 | Stephen Curry | 2010      | 2
 3000 | Michael Phelps | 2001      | 3
 3320 | Roger Federer | 2007      | 4
 3328 | Laender Paes | 2009      | 5
(5 rows)

postgres=# select * from trip;
-----
 from_city | to_city | return_date | trip_id | ssn | departure_date
-----+-----+-----+-----+-----+-----
 paris     | chennai | 2010-07-02 | 1       | 1000 | 2012-05-07
 berlin    | chennai | 2010-07-02 | 2       | 1000 | 2012-05-07
 delhi     | bangalore | 2010-07-02 | 3       | 1200 | 2012-05-07
 hyderabad | bangalore | 2010-07-02 | 4       | 3000 | 2012-05-07
(4 rows)

postgres=# select * from salesrep_expense;
-----
 trip_id | expense_type | amount
-----+-----+-----
 1       | travel       | 12300
 1       | stay         | 400
 2       | food         | 2200
 3       | travel       | 1100
 4       | travel       | 1200
(5 rows)

postgres=#
```

COMMANDS:-

```
SQL Shell (psql)
postgres=# select t.* from trip as t, salesrep_expense as se where t.trip_id=se.trip_id and se.amount>2000;
-----
 from_city | to_city | return_date | trip_id | ssn | departure_date
-----+-----+-----+-----+-----+-----
 paris     | chennai | 2010-07-02 | 1       | 1000 | 2012-05-07
 berlin    | chennai | 2010-07-02 | 2       | 1000 | 2012-05-07
(2 rows)

postgres=# select ssn, count(*) as "Time visited" from trip where to_city='chennai' group by ssn having count(*) >1;
-----
 ssn | Time visited
-----+-----
 1000 | 2
(1 row)

postgres=# select sum(se.amount) as "full expense" from trip, salesrep_expense as se where trip.trip_id = se.trip_id and trip.ssn = 1000;
-----
 full expense
-----
 14900
(1 row)

postgres=# select * from salesperson order by name desc;
-----
 ssn | name      | start_year | dept_no
-----+-----+-----+-----
 1200 | Stephen Curry | 2010      | 2
 3320 | Roger Federer | 2007      | 4
 3000 | Michael Phelps | 2001      | 3
 3328 | Laender Paes | 2009      | 5
 1000 | Kobe Bryant | 2020      | 1
(5 rows)

postgres=#
```

4.

INPUT TABLE:-

```
SQL Shell (psql)
postgres=# select * from car;
 serial_no | manufacturener | price | model
-----+-----+-----+-----
          1 | dodge          | 10000 | durango
          3 | toyota         | 10000 | corolla
          4 | honda          | 10000 | city
          5 | benz           | 10200 | amg
          2 | toyota         | 20000 | innova
(5 rows)

postgres=# select * from options;
 serial_no | option_name | price
-----+-----+-----
          1 | carbon fibre made doors | 200
          2 | video entertainment system | 700
          3 | gps | 190
(3 rows)

postgres=# select * from sales;
 salesperson_id | serial_no | date | sales_price
-----+-----+-----+-----
              1 |          1 | 2004-12-04 | 5600
              1 |          2 | 2004-12-04 | 9600
              1 |          3 | 2005-12-09 | 19600
              2 |          2 | 2005-12-09 | 29600
              2 |          2 | 2006-12-10 | 600
              4 |          2 | 2006-12-12 | 10000
              4 |          4 | 2006-12-22 | 10300
(7 rows)
```

```
SQL Shell (psql)
postgres=# select * from sales;
 salesperson_id | serial_no | date | sales_price
-----+-----+-----+-----
              1 |          1 | 2004-12-04 | 5600
              1 |          2 | 2004-12-04 | 9600
              1 |          3 | 2005-12-09 | 19600
              2 |          2 | 2005-12-09 | 29600
              2 |          2 | 2006-12-10 | 600
              4 |          2 | 2006-12-12 | 10000
              4 |          4 | 2006-12-22 | 10300
(7 rows)

postgres=# select * from salespersonq4;
 salesperson_id | name | phone
-----+-----+-----
              2 | akshay | 49482229
              3 | sachin | 31462229
              4 | john | 91462229
              1 | kumar | 32199999
(4 rows)

postgres=#
```

COMMANDS:-

```
SQL Shell (psql)
postgres=# select car.serial_no, car.manufacturener, sales.sales_price from car inner join sales using(serial_no) inner join salespersonq4 as sp on sp.salesperson_id=sales.salesperson_id where sp.name='john';
 serial_no | manufacturener | sales_price
-----+-----+-----
          2 | toyota         | 10000
          4 | honda          | 10300
(2 rows)

postgres=# select serial_no, model from car where serial_no NOT IN (select car.serial_no from car inner join options using(serial_no) group by car.serial_no);
 serial_no | model
-----+-----
          4 | city
          5 | amg
(2 rows)

postgres=# select car.serial_no, car.model, sales.sales_price from car inner join sales using(serial_no) inner join options using(serial_no);
 serial_no | model | sales_price
-----+-----+-----
          1 | durango | 5600
          2 | innova | 9600
          3 | corolla | 19600
          2 | innova | 29600
          2 | innova | 600
          2 | innova | 10000
(6 rows)

postgres=# update salespersonq4 set phone=3449274 where name='kumar';
UPDATE 1
postgres=#
```

THANK YOU!!