Task_4_Solutions.sql

1-Combine Two Tables:

```sql
select p.firstName,p.lastName,a.city,a.state from Person p left join Address a
using(personId);
```

2-Replace Employee ID With The Unique Identifier:

```sql
select u.unique_id ,n.name from  EmployeeUNI u right join Employees n using(id);
```

3-Customer Who Visited but Did Not Make Any Transactions

```sql
select v.customer_id, count(v.customer_id) as "count_no_trans"
from Visits  v left join Transactions t using(visit_id) where t.visit_id is
null  group by v.customer_id;
```

4-Project Employees

```sql
select  p.project_id ,round(avg(e.experience_years),2) as "average_years" from
Project p join Employee e using( employee_id) group by project_id  ;
```

5-Sales Person

```sql
select name from SalesPerson
 where sales_id not in(select sales_id  from Orders o
 join Company c  on c.com_id=o.com_id where c.name="RED");
```

6-Rising Temperature

```sql
select w.id from Weather w join Weather t  on w.recordDate=t.recordDate+interval 1
day
where t.temperature<w.temperature;
```

7-Average Time of Process per Machine

```sql
select a.machine_id,round(avg(b.timestamp-a.timestamp),3) as "processing_time" from
Activity a join Activity b on a.process_id=b.process_id and a.machine_id=b.machine_id
and a.activity_type='start'  and
b.activity_type='end' group by a.machine_id;
```

8-Students and Examinations

```sql
select s.student_id,s.student_name ,sub.subject_name,count(e.student_id) as
"attended_exams"
from Students s cross join Subjects sub
left join Examinations  e on e.subject_name=sub.subject_name and
s.student_id=e.student_id
group by s.student_id,sub.subject_name,s.student_name order by
student_id,subject_name;
```

9-Managers with at Least 5 Direct Reports

```sql
select m.name from Employee e join Employee m
on m.id=e.managerID
group by m.name having count(e.id)>=5;
```

10-Confirmation Rate

```sql
# Write your MySQL query statement below
select s.user_id ,round(ifnull(sum( case when c.action='confirmed' then 1 else 0
end)/count(c.user_id),0),2)
as "confirmation_rate"
from Signups s left join Confirmations c on s.user_id=c.user_id group by s.user_id;
```

11-Product Sales Analysis III

```sql
select product_id,year as "first_year",quantity,price from Sales
where (product_id,year) in(select product_id ,min(year)from Sales group by
product_id) ;
```

12-Market Analysis

```sql
select  u.user_id as "buyer_id",u.join_date,count(o.order_id) "orders_in_2019"from
Users u left  join Orders o on o.buyer_id=u.user_id and year(order_date)=2019group by
u.user_id;
```