**Part 5 SQL Quires**

**Q1.Detecting Product Sales Anomalies Given a table of product sales. ldentify products that were sold on two or more non-consecutive days, meaning they had a gap of at least one day between sales.**

**CREATE TABLE sales\_products (**

**sale\_id INT PRIMARY KEY,**

**product\_id INT,**

**sale\_date DATE,**

**quantity INT**

**);**

**INSERT INTO sales\_products (sale\_id, product\_id, sale\_date, quantity) VALUES**

**(1, 101, '2099-03-01', 10),**

**(2, 101, '2099-03-02', 5),**

**(3, 101, '2099-03-05', 8),**

**(4, 102, '2099-03-01', 7),**

**(5, 102, '2099-03-02', 6),**

**(6, 103, '2099-03-03', 12),**

**(7, 103, '2099-03-06', 15),**

**(8, 103, '2099-03-07', 9);**

**with cte as (**

**select \*,**

**LAG(sale\_date,1) over(partition by product\_id order by sale\_date asc) as prev1**

**from sales\_products)**

**select product\_id**

**from cte**

**where DATEDIFF(DAY,prev1,sale\_date)>1  
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------Q2. Write an SQL query to check if both condition1 and condition2 are 'Y', and the minimum of two members. If the condition is met, return 'Y'; otherwise, return 'N'.**

**create table puzzle(**

**teamID int,**

**memberID varchar(10),**

**condition1 varchar(10),**

**condition2 varchar(10)**

**);**

**insert into puzzle values**

**(1,'m1','Y','Y'),**

**(1,'m2','Y','Y'),**

**(1,'m3','Y','Y'),**

**(1,'m4','Y','N'),**

**(2,'m1','Y','Y'),**

**(2,'m2','Y','N'),**

**(2,'m3','N','Y'),**

**(2,'m4','N','N'),**

**(2,'m5','N','Y'),**

**(3,'m1','Y','Y'),**

**(3,'m2','Y','N'),**

**(3,'m3','N','Y'),**

**(3,'m4','N','N'),**

**(3,'m5','Y','Y');**

**with cte as (**

**select \*,**

**case when condition1 = 'Y' and condition2 = 'Y' then 1 else 0 end as flag**

**from puzzle),**

**cte2 as (**

**select \*,**

**SUM(flag) over(partition by teamid order by teamid) as cnt**

**from cte)**

**select teamID,**

**memberID,**

**condition1,**

**condition2,**

**case when condition1 ='Y' and condition2 = 'Y' and cnt>=2 then 'Y' else 'N'**

**end as result**

**from cte2**