



SQL REAL TIME SCENARIOS

CASE STATEMENT

Q: Write a SQL query to get the Desired output from Input Table.

Input Table: Employee

Empid	Name	Gender	Department
1	Alexa	Female	IT
2	Naman	Male	Finance
3	Rita	Female	Finance
4	Priya	Female	HR
5	Shivangi	Female	HR
6	Rahul	Male	IT
7	Tanya	Female	Finance
8	Arun	Male	HR
9	Lakshya	Male	IT
10	Deepika	Female	HR

Output :

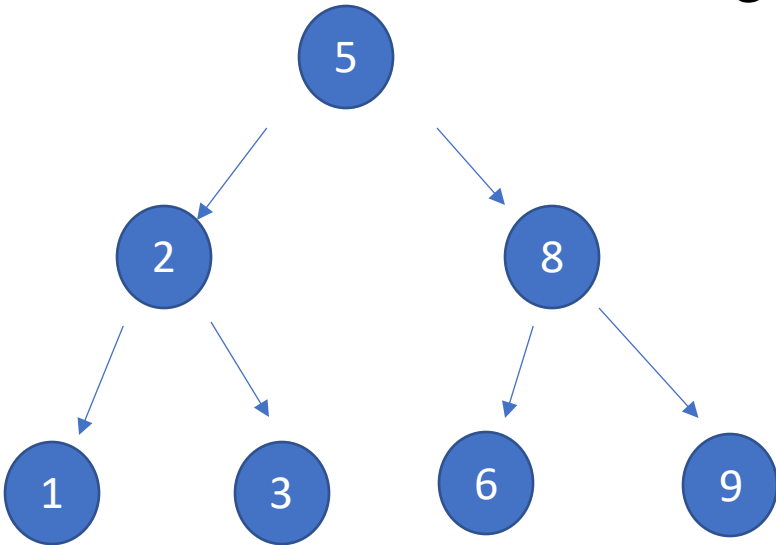
Department	TotalMale	TotalFemale
Finance	1	2
HR	1	3
IT	2	1

```
SELECT DEPARTMENT , SUM(CASE WHEN GENDER
= 'MALE' THEN 1 ELSE 0 END) AS TOTALMALE ,
SUM(CASE WHEN GENDER = 'FEMALE' THEN 1 ELSE
0 END) AS TOTALFEMALE
FROM EMPLOYEE
GROUP BY DEPARTMENT
```

Q: Write a SQL query to get the nodes of BINARY tree ?

Input Table : Binary

Node	Parent
1	2
3	2
6	8
9	8
2	5
8	5
5	Null



Output:

Node	Type
1	Leaf
2	Inner
3	Leaf
5	Root
6	Leaf
8	Inner
9	Leaf

```
Select Distinct A.node,
CASE WHEN B.Node is null THEN 'LEAF'
WHEN A.parent is null THEN 'ROOT'
ELSE 'INNER' END as node from Binary A
left join Binary B
on A.node=B.parent
```

Q- Write a SQL query to get desired output .

Input table : Airport

SOURCE	DESTINATION
DELHI	MUMBAI
MUMBAI	DELHI
DELHI	PATNA
BANGALORE	PUNE
PUNE	BANGALORE
CHANDIGARH	CHENNAI
PUNE	MUMBAI
HYDERABAD	GOA
GOA	HYDERABAD

Output:-

SOURCE	DESTINATION
DELHI	MUMBAI
DELHI	PATNA
BANGALORE	PUNE
CHANDIGARH	CHENNAI
PUNE	MUMBAI
GOA	HYDERABAD

```
SELECT DISTINCT  
CASE WHEN SOURCE < DESTINATION THEN SOURCE ELSE  
DESTINATION END AS SOURCE ,  
CASE WHEN SOURCE > DESTINATION THEN SOURCE ELSE  
DESTINATION END AS DESTINATION  
FROM AIRPORT
```

Q: Write a SQL query to find the percentage for Male and Female . Print the output to nearest integer.

Input Table: Gender

Output :

Gender
Male
Male
Male
Female
Male
Female

Male%	Female%
67	33

```
WITH CTE AS (  
  Select count(Gender) as total ,COUNT (CASE WHEN Gender='MALE' THEN 1 ELSE NULL  
  END ) AS CNTM,  
  COUNT (CASE WHEN GENDER='FEMALE' THEN 1 ELSE NULL END ) AS CNTF from Gender  
  A)  
Select ROUND(CAST (CNTM AS FLOAT)/CAST(TOTAL AS FLOAT),2)*100 as [Male%],  
ROUND(CAST (CNTF AS FLOAT)/CAST(TOTAL AS FLOAT),2)*100 as [Female%] from CTE
```

Q: Write the SQL query to get the desired output.

Input Table: Gender

ID	Name	Gender
1	Anita	Male
2	Rakesh	Female
3	Arjun	Female
4	John	Female
5	Deepika	Male
6	Shivani	Male

Output :

ID	Name	Gender
1	Anita	Female
2	Rakesh	Male
3	Arjun	Male
4	John	Male
5	Deepika	Female
6	Shivani	Female

```
Select ID,NAME, CASE WHEN GENDER='MALE' THEN 'FEMALE'  
WHEN GENDER='Female' THEN 'MALE' END AS GENDER from  
#gender - Select records
```

```
--Update table
```

```
Update #gender
```

```
Set Gender =(CASE WHEN GENDER='MALE' THEN 'FEMALE'  
WHEN GENDER='Female' THEN 'MALE' END )
```

Q: Write the SQL query to get desired output.

Input Table: Retail

Retailers	Brand
AMAZON	ONEPLUS
WALMART	REALME
SNAPDEAL	CELKON
FLIPKART	MI

Output :

Retailers	ONEPLUS	REALME	CELKON	MI
AMAZON	YES	NO	NO	NO
FLIPKART	NO	NO	NO	YES
SNAPDEAL	NO	NO	YES	NO
WALMART	NO	YES	NO	NO

```
SELECT RETAILERS, CASE WHEN ONEPLUS IS NOT NULL THEN 'YES' ELSE 'NO' END
AS ONEPLUS ,
CASE WHEN REALME IS NOT NULL THEN 'YES' ELSE 'NO' END AS REALME,
CASE WHEN CELKON IS NOT NULL THEN 'YES' ELSE 'NO' END AS CELKON,
CASE WHEN MI IS NOT NULL THEN 'YES' ELSE 'NO' END AS MI FROM (
SELECT RETAILERS, ONEPLUS, REALME, CELKON, MI AS MI FROM
( SELECT RETAILERS, BRAND FROM #RETAIL ) AS ST
PIVOT
(MAX(BRAND)) FOR BRAND IN (ONEPLUS, REALME, CELKON, MI)
) AS PT
) T
```