

## SQL Codes and Query

**Que 1.** You have provided a Table with name Date\_Amount, like

Date	Amount
01/02/2000	330
01/02/2000	440
02/02/2000	200
03/02/2000	500

Write a SQL query on which output would be like in ascending order of date and amount either decrease or increase from previous day. Output be like

Date	Changed_by
01/02/2000	770
02/02/2000	-570
03/02/2000	300

Ans:

```
SELECT Date, ifnull ( SUM(Amount)-LAG( SUM (Amount) ) OVER(ORDER BY Date), SUM(Amount) ) as Changed_by
```

```
FROM Date_Amount
```

```
GROUP BY Date
```

```
ORDER BY Date ASC;
```

**Que 2.** We have given a Table Country\_Worth with Individual person net worth with their country as

Country	Name	Net_Worth
India	Mukesh Ambani	400000000
US	Bill Gates	900000000
US	Jeff Bezos	950000000

Write a SQL query in order to find the cumulative net worth of top 10 individual for every country. Output be like

Country	Total_net_worth
India	1000000000
US	2000000000

Ans: **SELECT Country, MAX(net) as Total\_net\_worth**

```
FROM (SELECT Country, SUM (Net_Worth) OVER( PARTITION BY Country ORDER BY Net_Worth DESC rows 9 PRECEDING) as net
```

```
FROM Country_Worth ) Country_Worth
```

```
GROUP BY Country;
```

Que 3: We have given a Table Country\_Worth with Individual person net worth with their country as

Country	Name	Net_Worth
India	Mukesh Ambani	400000000
US	Bill Gates	900000000
US	Jeff Bezos	950000000

Write a SQL query in order to find the a country having average net worth greater than 1000000000 . Output be like

Country	avg_net_worth
India	1003000000
US	1900000000

Ans:

```
SELECT Country, AVG(Net_Worth) as avg_net_worth
FROM Country_Worth
GROUP BY Country
HAVING AVG(Net_Worth)> 1000000000;
```

Que 4. Table Name-msg

msg_trn	msg_type	Field_code	Field_value	Msg_crea_date
TF1005	700	50	CVC pvt ltd	10/10/2020
TF1006	710	59	PVC	01/09/2020
TF1005	710	59	Mahindra	12/10/2020
TF1005	707	59	Mahindra	12/11/2020
TF1005	707	59	ANOV	17/11/2020

Find latest field\_value of Field\_code for each msg\_trn by using SQL query.

Ans:

```
SELECT Field_value, Field_code ,MAX(from_date)
FROM msg
GROUP BY msg_trn;
```

Que 5.

**Case Details**

ID	Queueusername	Entrydate
1002	Maker	01/10/2020
1003	Checker	02/10/2020
1004	Exception	17/11/2020
1005	Exception	15/11/2020

**Exceptionview**

ID	queueusername	Exception_comment	actiondate
1005	Exception	Id card missed	04/09/2020
1004	Exception	Signature mismatch	01/09/2020
1004	Exception	Id missed	17/11/2020
1005	Exception	Signature mismatch	15/11/2020

Find the exact exception\_comment for the ids in "Exception" queueusername of case\_details table.

Final output must contain the entire column from case\_details. Fill the "exception\_comment" with "NA" where not available.

Ans:

```
SELECT c.ID, c.Queueusername, c.Entrydate,  
Ifnull(e.Exception_comment,"NA")
```

```
FROM case_details as c
```

```
JOIN Exceptionview as e ON c.ID=e.ID
```

```
WHERE c.queueusername="Exception";
```

**Que 6.** Given table Debit\_card\_master . Work on Question to mask the debit card numbers.  
Use SQL query to mask it

**Debit\_card\_master**

Cif_no	Debit_card
06535333	123456467890
05938884	345678234567
05884742	678901234567

Output be like:

**Debit\_card**

1234XXXX7890
3456XXXX4567
6789XXXX4567

**Ans:**

```
SELECT CONCAT( LEFT(Debit_card,4) , REPEAT('X',4),  
RIGHT(Debit_card,4)) as Debit_card  
  
FROM Debit_card_master;
```

**Que 7.** If marks column contain the comma separated values from student table. Write a SQL Query to calculate the count of that comma separated values?

**Student**

Student_name	Marks
Amit	30,49,27
Sukruta	20,30

Output would be:

Student_name	Marks_count
Amit	3
Sukruta	2

**Ans:**

```
SELECT Student_name, REGEXP_COUNT (Marks) as Marks_count  
  
FROM Student;
```

**Que 8.** Write a SQL query to count number of female employee in a table Employee:

**Employee**

Emp_id	Emp_fname	Emp_lname	Gender
101	rakesh	roshan	M
103	Radha	Mohan	F

**Ans:**

```
SELECT COUNT(*) From Employee  
  
WHERE Gender="F";
```

**Que 9.** Write simple SQL query to create a new table which consists of data and structure of copied from another table:

**Ans:**

```
SELECT * INTO new_table FROM Employee;
```

**Que 10.** From the given table employee print the 3 highest salaries data.

Employee_num	Employee_name	Department	salary
1	Aman	MARK	360000
2	Rohan	FUNC	430000
3	Mohan	MARK	380000

Output be:

salary
430000
380000
360000

**Ans:**

```
SELECT * FROM employee
```

```
ORDER BY salary DESC
```

```
Limit 3;
```

**Que. 11.** What is the Query to fetch first record from Employee Table as given above?

**Ans**

```
SELECT * FROM(
```

```
SELECT ROW_NUMBER () over( ORDER BY emp_no ASC) as rno, e.* FROM  
employees as e) as rno
```

```
where rno=1;
```

**Que. 12.** How to fetch monthly salary of Employee if annual salary is given?

Output be.

monthly_salary
30000
36500
31200

**Ans:**

```
SELECT Employee_name, salary/12 as monthly_salary from  
Employee;
```

**Que. 13:** How to Display odd rows in Employee table?

Output be:

Employee_num	Employee_name	Department	salary
1	Aman	MARK	360000
3	Mohan	MARK	380000
5	Rakesh	BUSA	570000

**Ans:**

```
SELECT * FROM(  
SELECT ROW_NUMBER() OVER( ORDER BY emp_no ASC) as rno, e.* FROM  
employees as e) as rno  
WHERE MOD(rno,2)=1;
```

**Que. 14.** How do I Fetch only common records between 2 tables?

**Ans :**

```
SELECT * FROM Employee  
INTERSECT  
SELECT * FROM Employee1;
```

**Que. 15.** Find Query to get information of Employee where Employee is not assigned to the department.

**Employee**

Emp_no	Employee_name	Department_name	salary
1	Mohan	MRKT	500000
2	Sohan	FINC	550000

**Department**

Dept_no	Dept_name	salary
deno_1	MRKT	500000
deno_2	BISA	600000

**Output be:**

Emp_no	Employee_name	Dept_name	salary
1	Mohan	MRKT	500000

**Ans: SELECT \* FROM Employee**

**WHERE Dept\_name NOT IN (SELECT Dept\_name FROM Department);**

**Que 16:** how to write sql query for the below scenario

**I/p:ORACLE**

**O/p:**

**O  
R  
A  
C  
L  
E**

i.e, splitting into multiple columns a string using sql.

**Ans:**

**SELECT SUBSTR ('ORACLE',Level,1) FROM DAUL  
CONNECT BY Level<= LENGTH('ORACLE”);**

**Que. 17.** How Do you find all Employees with its managers?(Consider there is manager id also in Employee table)

**Employee**

Emp_no	Emp_name	Department_name	salary
1	Mohan	MRKT	500000
2	Sohan	FINC	550000

**Manager**

Mngr_no	Mngr_name	Joining_date
1	Rakesh	2010-10-13
2	Rohan	2011-09-12

**Output be:**

Emp_name	Mngr_name
Mohan	Rakesh
Sohan	Rohan

**Ans:**

```
SELECT e.emp_name, m.mngr_name FROM Employee as e
JOIN
Manager as m ON e.Emp_no=m.Mngr_no;
```

**Que. 18:** How to remove duplicate rows from table?

**ANS:**

```
DELETE FROM Employee
WHERE ID NOT IN
(
    SELECT MAX(emp_no) AS MaxRecordID
    FROM Employee
    GROUP BY Emp_name, Department_name, salary
);
```

**Que. 19.** Write a query to update “col2” s to exactly opposite to “col-1” values.

**Columns**

Col1	Col2
1	0
0	1
0	0
1	0
0	1

**Ans:**

```
UPDATE Columns set col2= (CASE
WHEN col1=1 THEN 0 ELSE 1 END);
```

**Que 20:** Given The table mass\_table. Write a SQL query to print weights in Kg and Gm.

weight
50.36
49.45
67.34
51.34



**Output be:**

<b>weight</b>	<b>kg</b>	<b>gm</b>
50.36	50	36
49.45	49	49
67.34	67	34
51.34	51	34

**Ans :**

```
SELECT weight, FLOOR (weight) as kg, ABS(weight-CAST( weight as  
INT)) as gm
```

```
FROM mass_table;
```