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 quiry.

Ans:

 SELECT Field_value, Field_code ,MAX(from_date)

FROM msg

GROUP BY msg_trn;

Que 5.   **Case Details**

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

Exceptionview

ID	queuname	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" queuname 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.Queuname, c.Entrydate,
Ifnull(e.Exception_comment,"NA")

FROM case_details as c

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

WHERE c.queuname="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

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 Employee_num 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 Employee_num 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 Emp_no 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:

weight	kg	gm
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;