CASE_STUDY (NUMBER -02)---SOLUTION SUBMISSION
ON
AZURE ANALYTICS
BY

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BATCH:DXC-262-ANALYTICS-B12-AZURE   **COMPANY –** DXC TECHNOLOGY

TRAINING UNDER : MANIPAL PRO LEARN   **TRAINER NAME** – MR. AJAY KUMAR

DATE OF SUBMISSION : 31-05-2022   **NO OF TEST CASES** :10

EMPLOYEE DOMAIN - AZURE ANALYTICS

PROBLEM STATEMENT:

Assignment 31st May 2022:

Global-tech incorporation is leading Biotech & Medical distribution
company, has decided to migrate their data warehouse (around volume
of 300TB uncompressed) to Cloud. Also, this organization has decided to
migrate all downstream applications to Azure. Since its COVID –
pandemic situation, hence its critical time & ETA is very less, the whole
migration had to happen seamlessly, Using Azure cloud Service – we
have to develop solutions for Global-tech. and migration activity to be
performed.

PART - 1:

Table:

emp_id	emp_name	job_name	manager_id	hire_date	salary	commission	dep_id
68319	KAYLING	PRESIDENT		1991-11-18	6000.00		1001
66928	BLAZE	MANAGER	68319	1991-05-01	2750.00		3001
67832	CLARE	MANAGER	68319	1991-06-09	2550.00		1001
65646	JONAS	MANAGER	68319	1991-04-02	2957.00		2001
67858	SCARLET	ANALYST	65646	1997-04-19	3100.00		2001
69062	FRANK	ANALYST	65646	1991-12-03	3100.00		2001
63679	SANDRINE	CLERK	69062	1990-12-18	900.00		2001
64989	ADELYN	SALESMAN	66928	1991-02-20	1700.00	400.00	3001
65271	WADE	SALESMAN	66928	1991-02-22	1350.00	600.00	3001
66564	MADDEN	SALESMAN	66928	1991-09-28	1350.00	1500.00	3001
68454	TUCKER	SALESMAN	66928	1991-09-08	1600.00	0.00	3001
68736	ADNRES	CLERK	67858	1997-05-23	1200.00		2001
69000	JULIUS	CLERK	66928	1991-12-03	1050.00		3001
69324	MARKER	CLERK	67832	1992-01-23	1400.00		1001

THE CASES :

case 9. From the following table, write a SQL query to find the employee ID, salary, and commission of all the employees

case 10. From the following table, write a SQL query to find the unique department with jobs. Return department ID, Job name.

case 11. From the following table, write a SQL query to find those employees who do not belong to the department 2001.
Return complete information about the employees.

case 12. From the following table, write a SQL query to find those employees who joined before 1991.
Return complete information about the employees

case 13. From the following table, write a SQL query to compute the average salary of those employees who work as 'ANALYST'.
Return average salary.

case 14. From the following table, write a SQL query to find the details of the employee 'BLAZE'

case 15. From the following table, write a SQL query to find those employees whose commission is more than their salary.
Return complete information about the employees

case 16. From the following table, write a SQL query to find those employees whose salary exceeds 3000 after giving 25% increment.
Return complete information about the employees

case 17. From the following table, write a SQL query to find the names of the employees whose length is six.
Return employee name

case 18. From the following table, write a SQL query to find those employees who joined in the month January.
Return complete information about the employees

case 19. From the following table, write a SQL query to find the name of employees and their manager separated by the string 'works for'.

case 20. From the following table, write a SQL query to find those employees whose designation is 'CLERK'.
Return complete information about the employees.
Please create a word / pdf document, and send it to : avyuktitraining1@gmail.com

INTRODUCTION

This is a case study given by manipal pro learn team on the basis of the training done in the forenoon session of this morning. The main objective behind this case study is to work on industry-based problems and achieve solutions for the solutions.

The problem statement have ten cases and these are of easy to moderately difficult level. All the cases have been focused on what the trainer taught in the earlier sessions. Basic operations in the data using SQL are performed that include :

- CREATE

- INSERT

- UPDATE

- SELECT

Along with some more interesting cases.

This case study gives me immense confidence in mastering the domain that has been assigned to me. The queries have been highlighted with green color and later the snap shot of the output is attached.

CREATING TABLE :

CREATE TABLE globetechtb2312 (emp_id INT , emp_name VARCHAR(220) ,job_name VARCHAR(220) , manager_id INT, hire_date DATE , salary FLOAT , commission FLOAT , dep_id INT).

INSERTING :

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

values (68319 , 'KAYLING' ,' PRESIDENT' , NULL , DATE'1991-11-18', 6000.00 , NULL , 1001);

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

values (66928 , 'BLAZE' , 'MANAGER' , 68319 , DATE'1991-05-01 ' , 2750.00 ,NULL , 3001);

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

values (67832 , 'CLARE' , 'MANAGER ' , 68319 ,DATE'1991-06-09' , 2550.00 ,NULL, 1001);

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

values (65646, 'JONAS' , 'MANAGER' , 68319 , DATE'1991-04-02' , 2957.00 ,NULL ,2001);

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

values (67858, ' SCARLET', 'ANALYST' , 65646 , DATE'1997-04-19' , 3100.00 ,NULL , 2001);

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

values (69062 , 'FRANK' , 'ANALYST' , 65646 , DATE'1991-12-03' , 3100.00 ,NULL ,2001);

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

values (63679 ,'SANDRINE' , 'CLERK' , 69062 , DATE'1990-12-18' , 900.00 ,NULL, 2001);

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

values (64989 , 'ADELYN' , 'SALESMAN' , 66928 , DATE'1991-02-20' , 1700.00 , 400.00 , 3001);

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

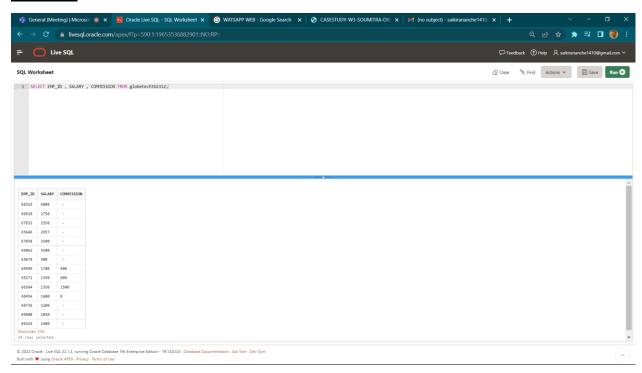values (65271 , 'WADE' , 'SALESMAN' , 66928 , DATE'1991-02-22' , 1350.00 , 600.00 , 3001);

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

values (66564 , 'MADDEN' , 'SALESMAN', 66928 , DATE'1991-09-28' , 1350.00 , 1500.00 , 3001);

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

values (68454 , 'TUCKER' , 'SALESMAN' , 66928 , DATE'1991-09-08' , 1600.00 , 0.00 , 3001);

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

values (68736 , 'ADNRES' , 'CLERK' , 67858, DATE'1997-05-23' , 1200.00 , NULL , 2001);

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

values (69000 , ' JULIUS' , 'CLERK' , 66928 , DATE'1991-12-03' , 1050.00 , NULL , 3001);

INSERT INTO globetechtb2312 (emp_id , emp_name ,job_name , manager_id, hire_date , salary , commission , dep_id)

values (69324 ,' MARKER' , 'CLERK' , 67832,DATE'1992-01-23',1400.00, NULL, 1001);
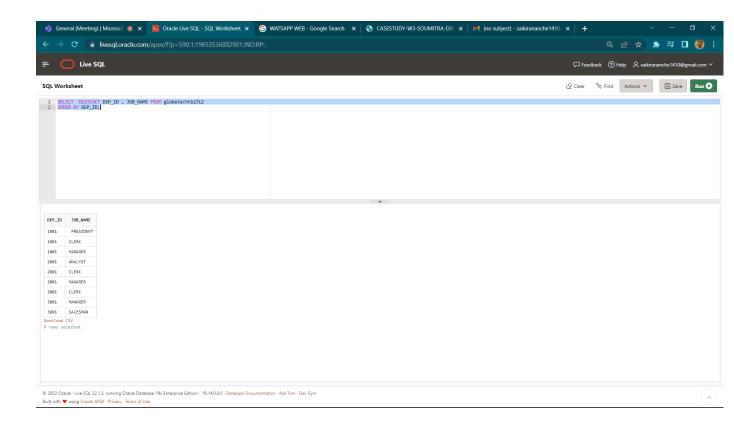

CASE 9:

SELECT EMP_ID , SALARY , COMMISSION FROM globetechtb2312;

OUTPUT:

CASE 10:

SELECT DISTINCT DEP_ID , JOB_NAME FROM globetechtb2312

ORDER BY DEP_ID;

OUTPUT:

DEP_ID	JOB_NAME
1001	PRESIDENT
1001	CLERK
1001	MANAGER
2001	ANALYST
2001	CLERK
2001	MANAGER
3001	CLERK
3001	MANAGER
3001	SALESMAN

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9 rows selected.

CASE 11;

SELECT EMP_NAME, DEP_ID FROM globetechtb2312

WHERE DEP_ID != 2001;

OUTPUT:

CASE 12 :

SELECT *FROM globetechtb2312

WHERE HIRE_DATE < DATE'1991-1-1';

OUTPUT:

CASE13:

From the following table, write a SQL query to compute the average salary of those employees who work as 'ANALYST'.
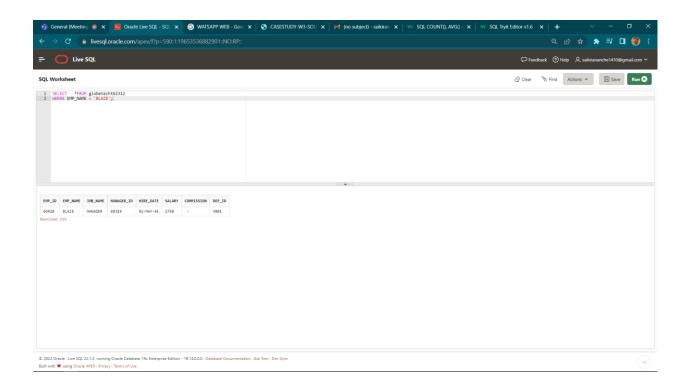Return average salary.

SELECT   AVG(SALARY) FROM globetechtb2312
WHERE JOB_NAME = 'ANALYST';

OUTPUT:

CASE 14

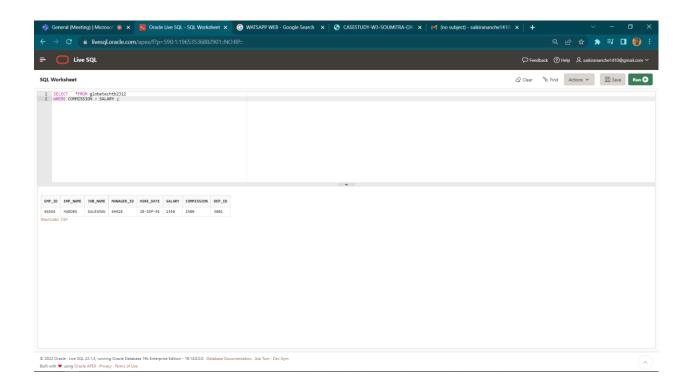From the following table, write a SQL query to find the details of the employee 'BLAZE'

<mark>SELECT   *FROM globetechtb2312
WHERE EMP_NAME = 'BLAZE';</mark>

OUTPUT:

CASE15

From the following table, write a SQL query to find those employees whose commission is more than their salary.Return complete information about the employees

SOLUTION

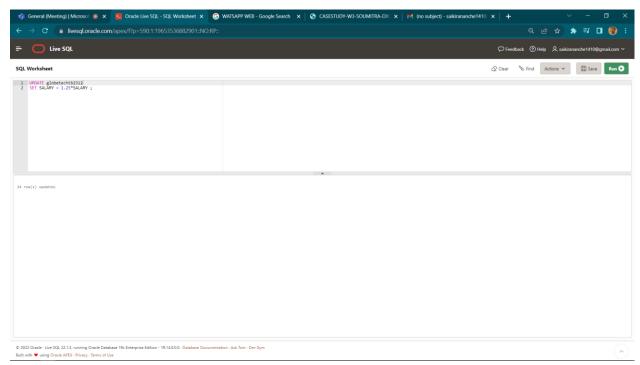SELECT   *FROM globetechtb2312
WHERE COMMISSION > SALARY ;

OUTPUT:

EMP_ID	EMP_NAME	JOB_NAME	MANAGER_ID	HIRE_DATE	SALARY	COMMISSION	DEP_ID
66564	MADDEN	SALESMAN	66928	28-SEP-91	1350	1500	3001

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CASE16

From the following table, write a SQL query to find those employees whose salary exceeds 3000 after giving 25% increment.Return complete information about the employees.

SOLUTION :
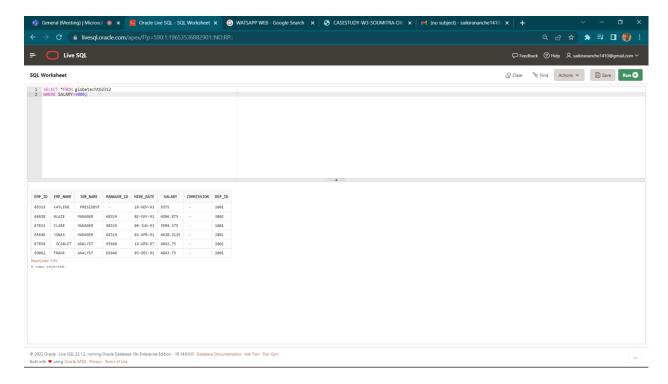
UPDATE globetechtb2312
SET SALARY = 1.25*SALARY ;

OUTPUT:

STEP 2;
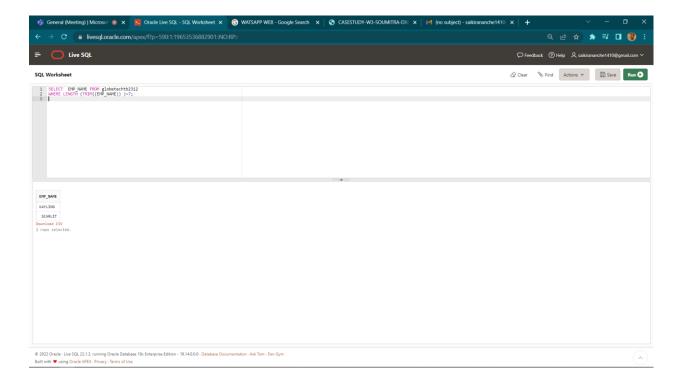
SELECT *FROM globetechtb2312
WHERE SALARY>3000;

CASE17:

From the following table, write a SQL query to find the names of the employees whose length is six.Return employee name.
SOLUTION :
SELECT EMP_NAME FROM globetechtb2312
WHERE LENGTH (TRIM((EMP_NAME)))=7;
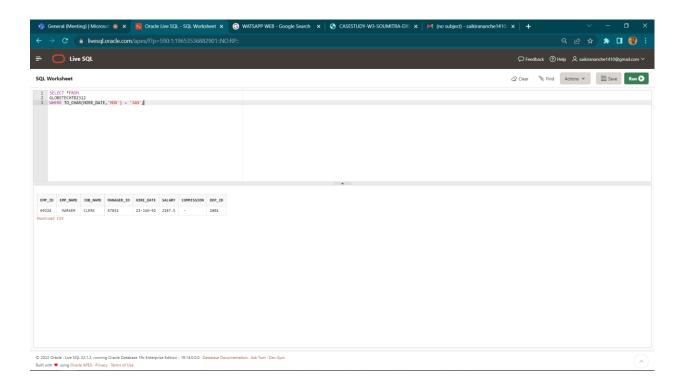**OUTPUT:**

CASE18:

From the following table, write a SQL query to find those employees who joined in the month January.

Return complete information about the employees

SOLUTION:
SELECT *FROM
GLOBETECHTB2312
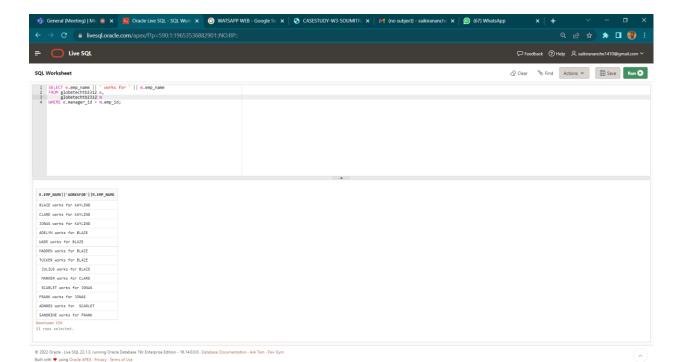WHERE TO_CHAR(HIRE_DATE,'MON') = 'JAN';

OUTPUT:

CASE 19:

From the following table, write a SQL query to find the name of employees and their manager separated by the string 'works for'.

SOLUTION :

<mark>SELECT e.emp_name || ' works for ' || m.emp_name
FROM globetechtb2312 e,
    globetechtb2312 m
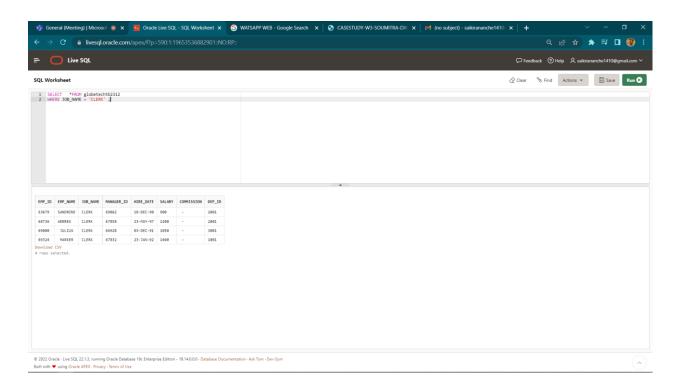WHERE e.manager_id = m.emp_id;</mark>

OUTPUT:

CASE20:

From the following table, write a SQL query to find those employees whose designation is 'CLERK'.

Return complete information about the employees.

SOLUTION :

SELECT   *FROM globetechtb2312
WHERE JOB_NAME = 'CLERK' ;

OUTPUT:

RESULT

All the test cases have been solved and presented successfully in the present document.

CONCLUSIONS

All the case studies have been solved successfully with all the concepts that have been covered in the training session. It's really a great experience of learning while solving the cases. This case study gave me immense confidence regarding my ability to upskill in new technologies.

REFERENCES

- https://www.w3schools.com/sql/sql_count_avg_sum.asp