1. What is the difference between the “WHERE” clause and the “HAVING” clause?

Where clause is used to filters the data from grouped records. It is used to provide the conditions.

Having clause is used to provide conditions and filter the data from grouped data based on conditions.

2. What is the difference between “Primary Key” and “foreign Key”?

The relation between primary key and foreign key like as mother and child relation .

Primary key allows only unique values and doesn’t allow duplicate values. It acts like a mother

Foreign key is taken references on primary key table. It acts like a child

3. What is the difference between primary key and unique constraints?

Primary key is used to allow only unique values it not allowed duplicate records and also null values.

Unique key is similar to primary key but it allows only one null value.

4. What is database normalization? Normalization :- Normalization is the process to eliminate data redundancy and enhance data integrity in the table. Normalization also helps to organize the data in the database. It is a multi-step process that sets the data into tabular form and removes the duplicated data from the relational tables.

The types of normalization:-

First normal form (1 NF)

Second normal form (2 NF)

Third normal form (3 NF)

Boyce code normal form or fourth normal form (BCNF or 4 NF)

Fifth normal form (5 NF)

Sixth normal form (6 NF)

5. What are the differences between DDL, DML and DCL in SQL?

DDL means data definition language this are auto commit commands .This are used to database objects. This are session independent .The DDL commands are create, alter, drop, rename, flashback and purge.

DML means data manipulating language. It is used to handle the data in database object. These are non-auto commit commands. These are session dependent. The DML commands are insert, update, delete.

DCL means data control language. The DCL is used to provide the access to the user .The DCL commands are

GRANTS: - it is used to give permission to the user.

REVOKE: - it is used to cancel the permission to the user.

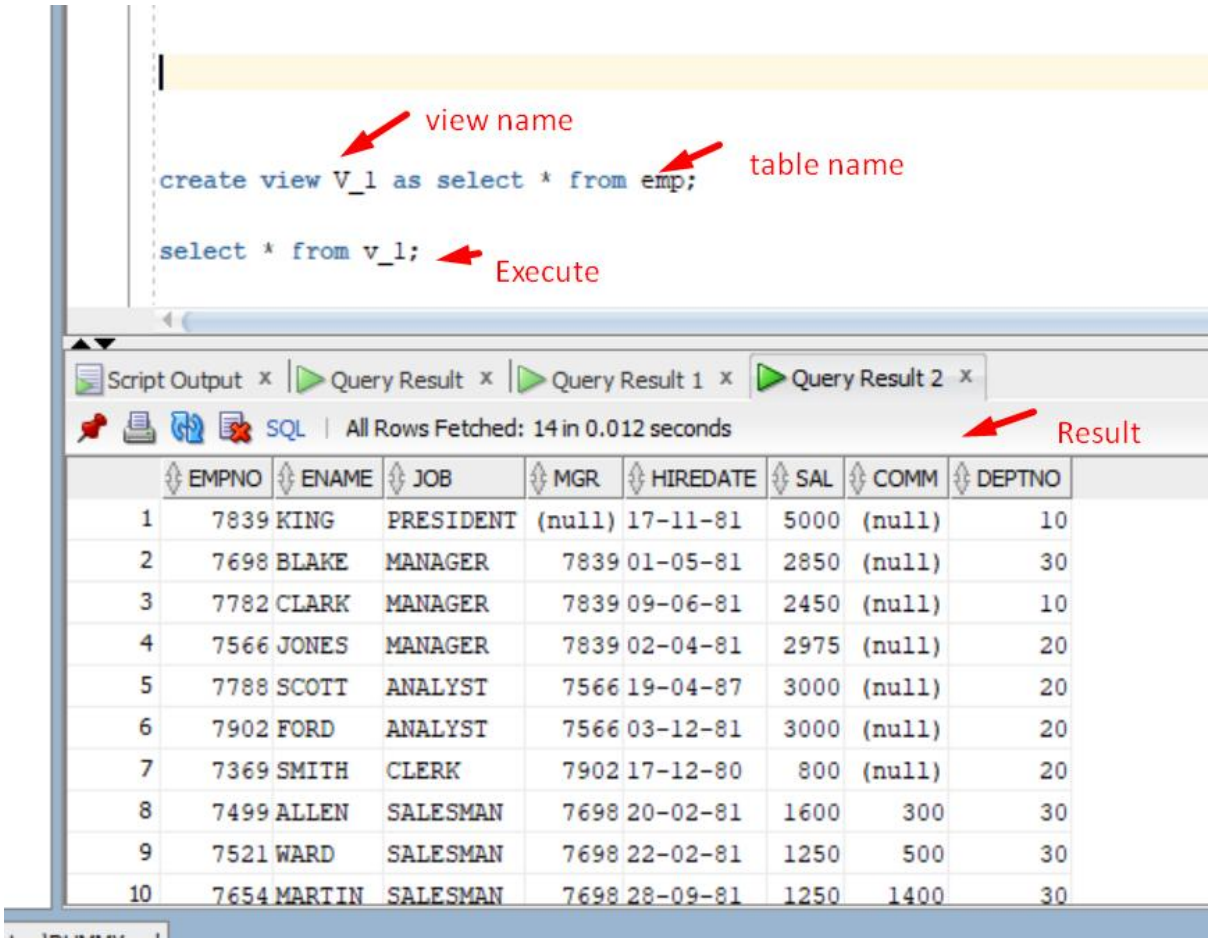
6. What is a view in SQL? How to create one?

These are advanced of synonyms. The virtual table to hide the base table and its work like a mirror image. It's doesn't have own structure .all views are stored in all views. There are several types of views in SQL.

They are 1.simple views, 2.complex views, 3.force views, 4.horizontal views, 5.vertical views, 6.functional views, 7. Materialized views, 8.partition views and 9.Inline views.

Create view on table

Syntax: - create view view name as select * from table name;



	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10
2	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
3	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
4	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
5	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
6	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
7	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
8	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
9	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
10	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30

7. What are the uses of view?

The uses of views

To join tables and simplify multiple tables into one table.

It like mirror images of base table.

It is used to data security purposes.

8. What is a transaction

Transactions:- A transactions has only two results : success or failure. A transaction work on DML commands and not work on DDL commands. The transaction includes commit, rollback, save point and truncate.

9. What are indexes?

The indexes are simple defined as to receive data from data base quickly.

To increase performance while retrieve the data from the data base.

It will make use of user id's. All indexes are stored in all_indexes.

There are several types of indexes are in SQL. They are 1.simple index, 2.complex index, 3.unique index, 4.functional indexes, and 5.bitmap indexes.

10. What is a Table in a database?

All data stored in table structure. In RDBMS all data stored in table structure.

It is easy to analyse data and filter the data. The data is logically organised by rows and columns.

11. What is database lock and what are the different types of lock?

Database locks: - Database lock basically signifies the transaction about the current status of the data item i.e. whether that data is being used by other transactions or not at that point of time.

There are two types of lock are in database they are Shared lock and Exclusive lock.

12. What are the different types of normalization?

The types of normalization:-

First normal form (1 NF)

Second normal form (2 NF)

Third normal form (3 NF)

Boyce code normal form or fourth normal form (BCNF or 4 NF)

Fifth normal form (5 NF)

Sixth normal form (6 NF)

13.What is a materialized view?

The materialized_view different compare to all views. All views are don't have their own structure but the materialized view have own structure.

It doesn't allow the DML operations on views. It is used to store historical data.

Syntax: - create materialized view view name as select * from table name;

14.Explain the difference between DELETE, TRUNCATE commands?

DELETE	TRUNCATE
It is used to delete the data in table.	It is used to delete the data from the database. It work like a delete + truncate
In case we delete the data from table before we commit we can roll back again.	It is permanent deleted.
Syntax:-delete from table name where condition;	Syntax:-truncate table table name;

15.What is Union, minus and Intersect commands?

Union:-union is used to removes the same values in both tables.

It doesn't display the duplicate values.

Syntax: - select * from table 1 union select * from table2;

Minus:- It displays the first query records, which are not found in the second query records.

Syntax:-select * from table1 minus select * from table2;

Intersect: - It displays the common values from two tables.

Syntax: - select * from table1 intersect select * from table 2;

16.What are constraints? Explain different types of constraints

Constrains: - The constraints are rules which are used to allow the valid data.

There are several types of constraints, they are

1. Primary key
2. Composite primary key
3. Unique
4. Not null
5. Default
6. Foreign key / Reference key.

1. Primary key: - The primary key doesn't allow the duplicate records and null values.

Syntax: - create table tablename (slno number (7) primary key);

2. Composite primary key: - The composite primary key is used to create primary key on multiple columns.

Syntax: - create table tablename (slno number (5), Ename varchar2 (10) primary key (slno, Ename) ;

3. Unique: - unique allows only unique values it doesn't allow duplicate records but in unique only one null values will be allowed.
   Syntax: - create table tablename (slno number (10) unique);

4. Not null: - It allows only not null values and it doesn't allows null values.

   Syntax: - create table tablename (slno number (5) not null);

5. Check:-It is used to check the condition.

   Syntax: - create table tablename (slno number (5), check (slno>o) ;

6. Default: - It is used to insert default values.

   Syntax: - create table tablename (slno number (5), grade char (2) default 'A');

7. Foreign Key: - It is used to maintain a reference from one table to another table.

   Syntax: - create table table1 (slno number (5) primary key) Create table table2 (dno number (5), dname varchar2 (10), sno number (5) references table1 (sno);

17.What is a join and explain different types of joins with an example?

Joins: - The joins are used to join the tables. The joins are divided into some types. They are 1.simple join, 2.self-join, 3.outer join

1). Simple Join:-

a) Equi Join it is used to join two tables based on equal condition.

Syntax: - select * from EMP, dept where emp.deptno=dept.deptno;

b) Non Equi Join it is used to join two tables based on not equal condition

Syntax: - select * from EMP, dept where emp.deptno! = dept.deptno;

2) Self join: - It is used to join the table itself.

Syntax: select * from EMP e1, EMP e2 where e1.deptno=e2.deptno;

3) Outer Join

a). Left Outer Join:- It is used to display the full details of the left table and matched records of the right table.

Syntax: select * from EMP e, dept d where emp.deptno = dept.deptno (+); b)

b). Right Outer Join: - It is used to display the full details of the right table and matched records of the left table.

Syntax: select * from EMP e, dept d where emp.deptno (+) =dept.deptn;

c).Full Outer Join: - If you join left and right outer joins with union operators such joins are called full outer join.

Syntax: select * from EMP e, dept d where emp.deptno (+) = dept.deptno

Union

Select * from EMP e, dept d where emp.deptno (+) = dept.deptno.

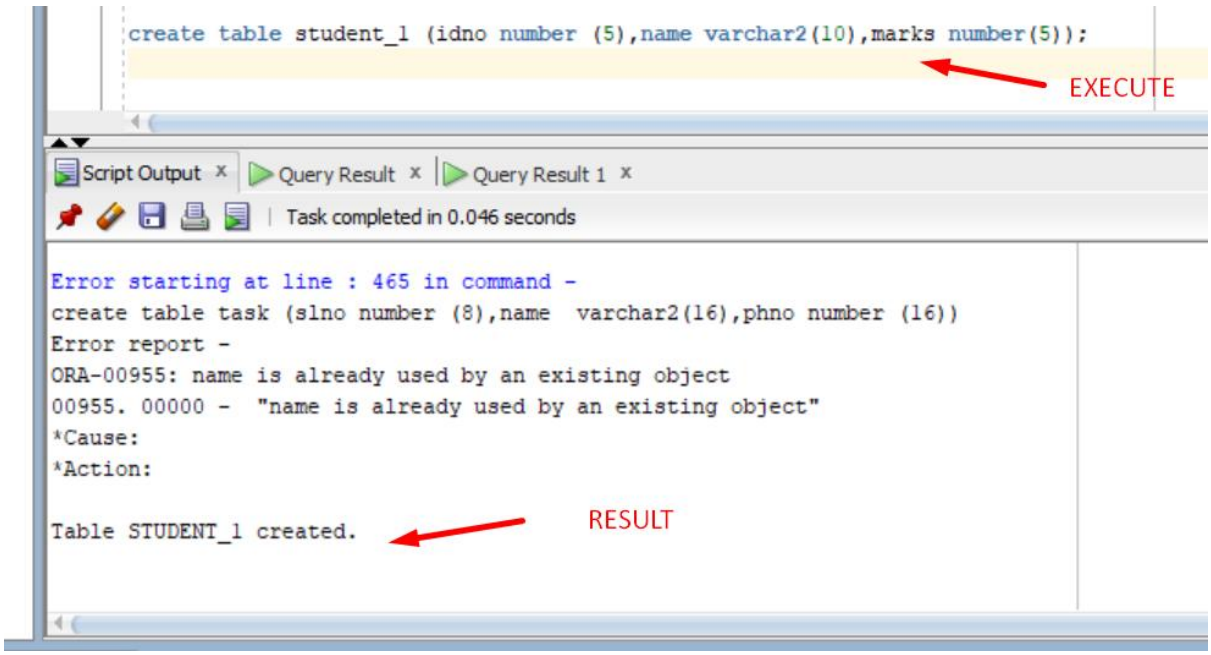
18. What is alias of a table?

Alias of the table: - In SQL the alias are used to give temporary name for a table, table in the column when the query is lengthy we place a name for that query in short word or single letters. It reduces time also.

19. Write all ways of create table and Insert data into a table options.

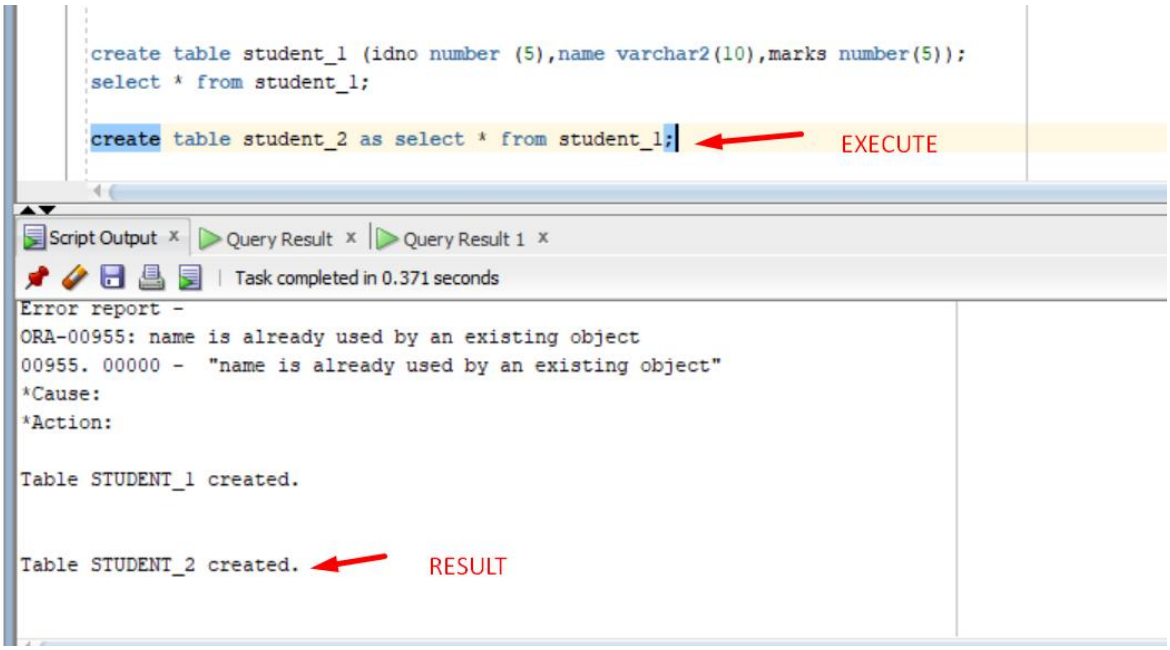
a. Create regular syntax

Create table student_1 (idno number (5), name varchar2 (10), marks number (5)),



b. Create table using select method

Create table student_2 as select * from student_1;

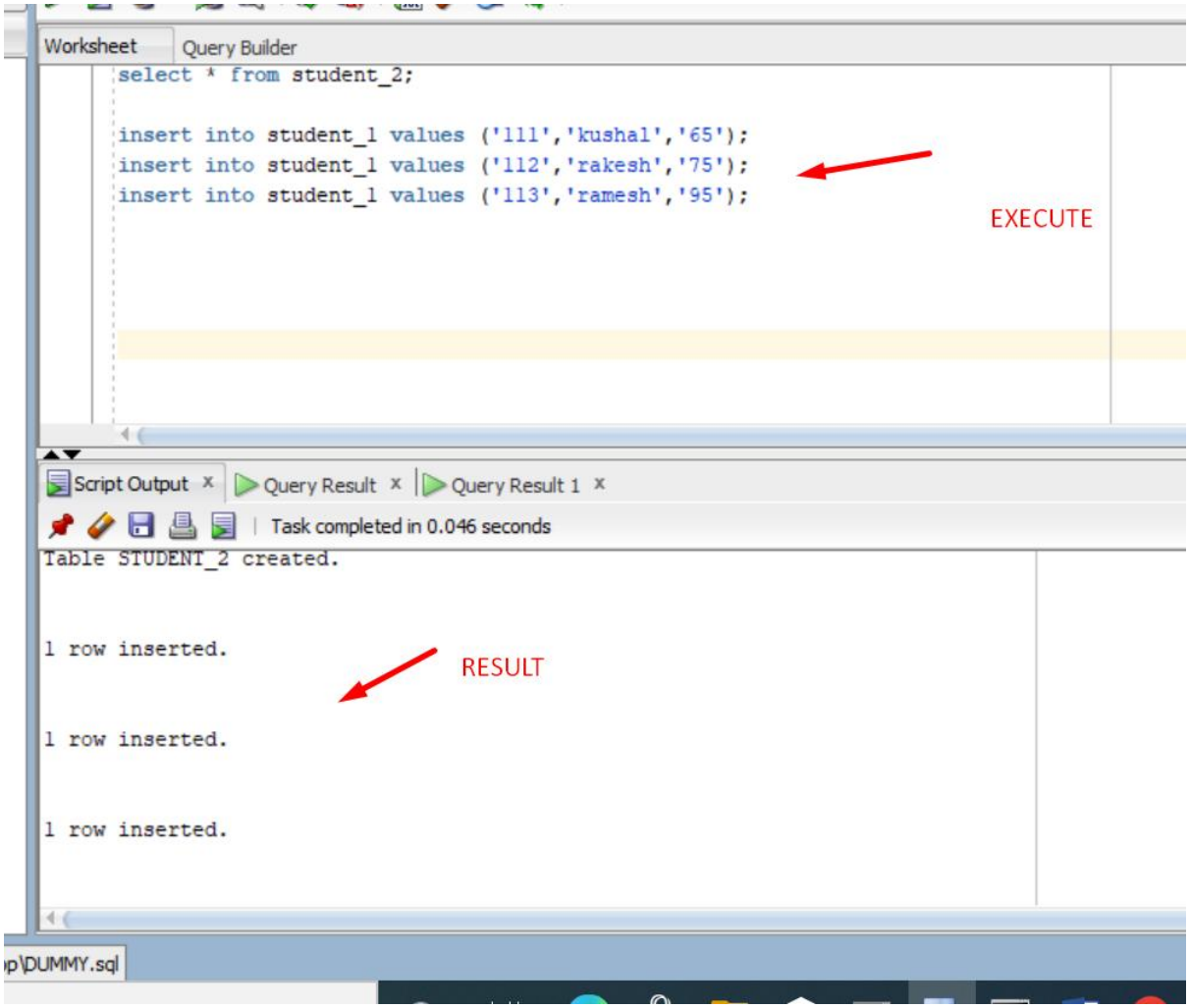


c. Insert regular syntax

Insert into student_1 values ('111','kushal','65');

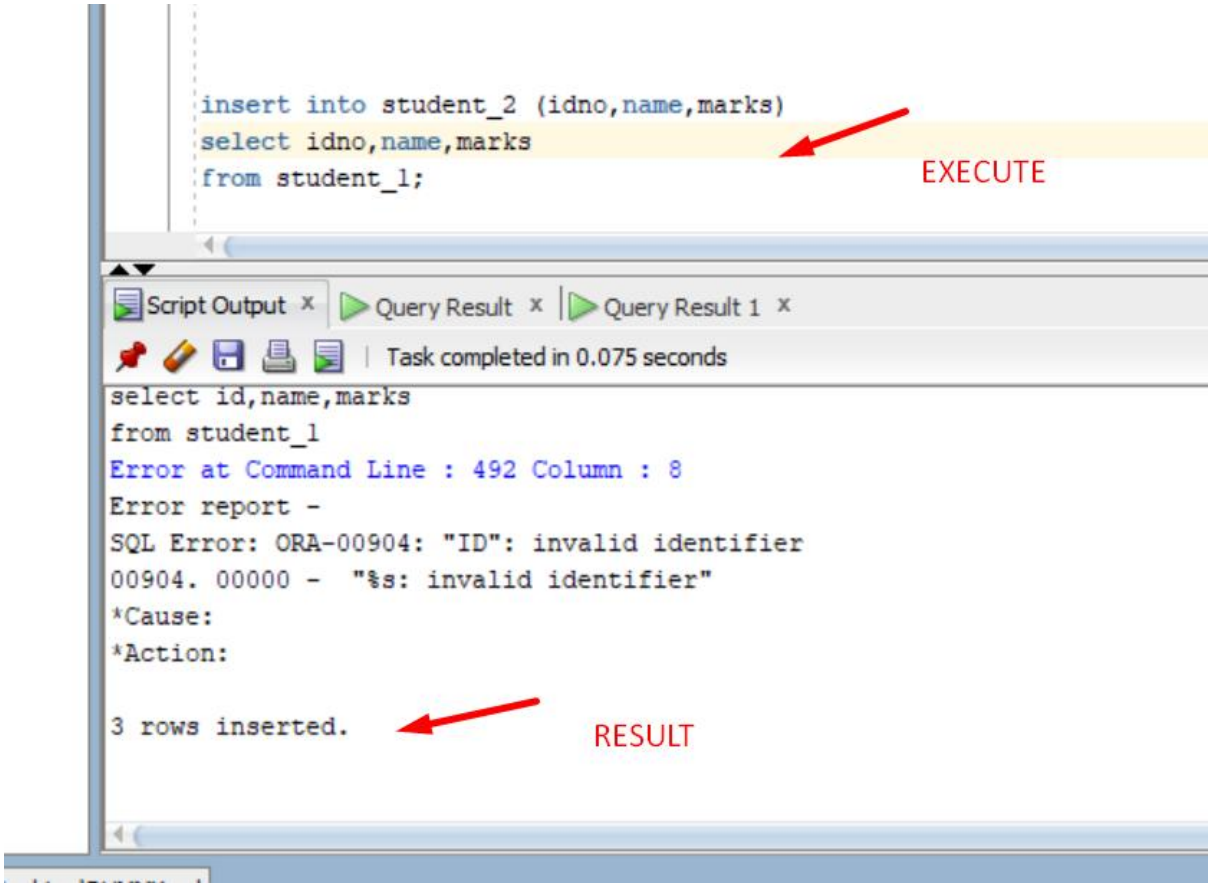
Insert into student_1 values ('112','rakesh','75');

Insert into student_1 values ('113','ramesh','95');



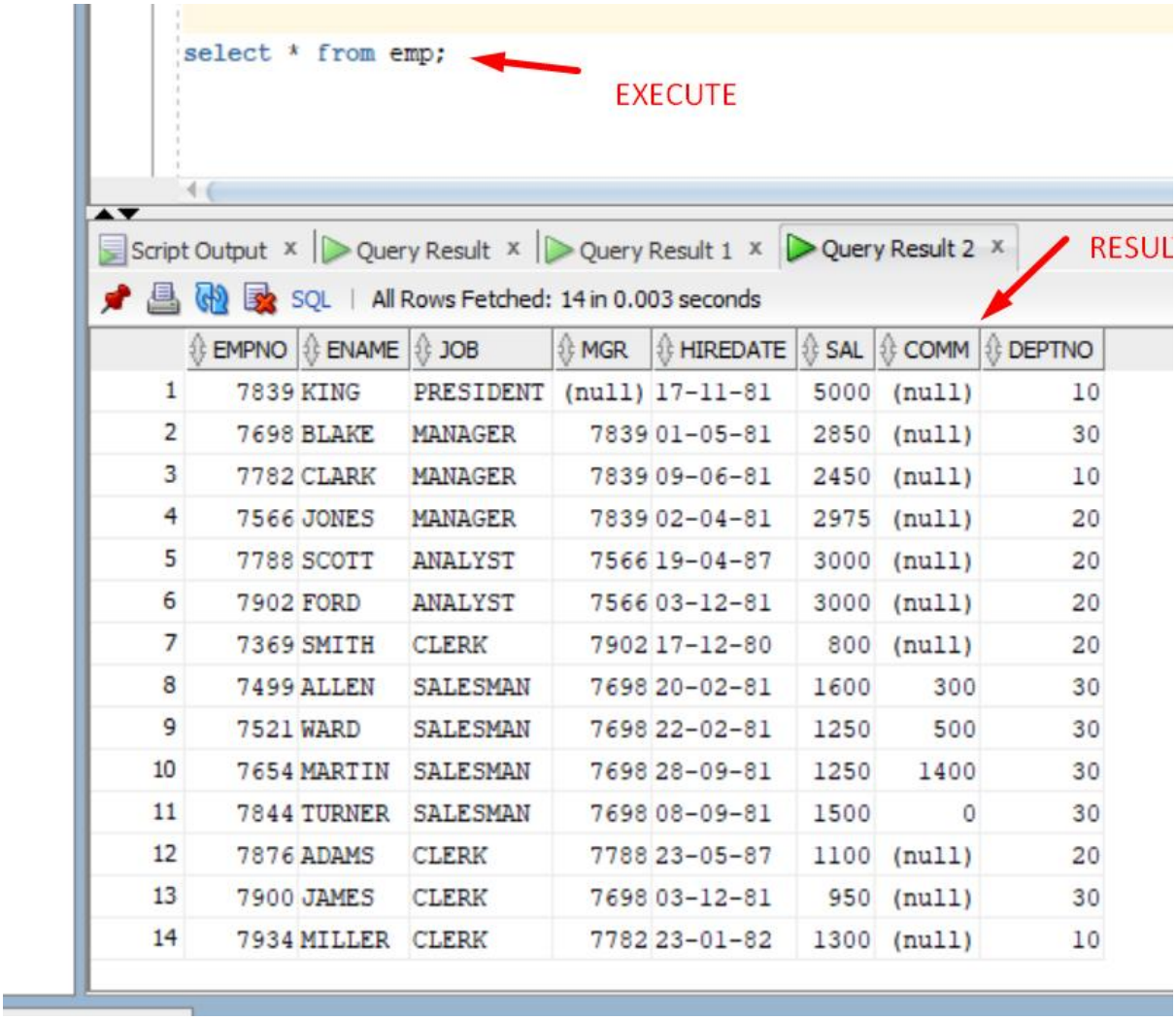
d. Insert table using select method

```
Insert into student_2 (idno, name, marks)
Select idno, name, marks
from student_1;
```



20. Display all the information of the EMP table?

Select * from emp;



	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10
2	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
3	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
4	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
5	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
6	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
7	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
8	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
9	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
10	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
11	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30
12	7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20
13	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30
14	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10

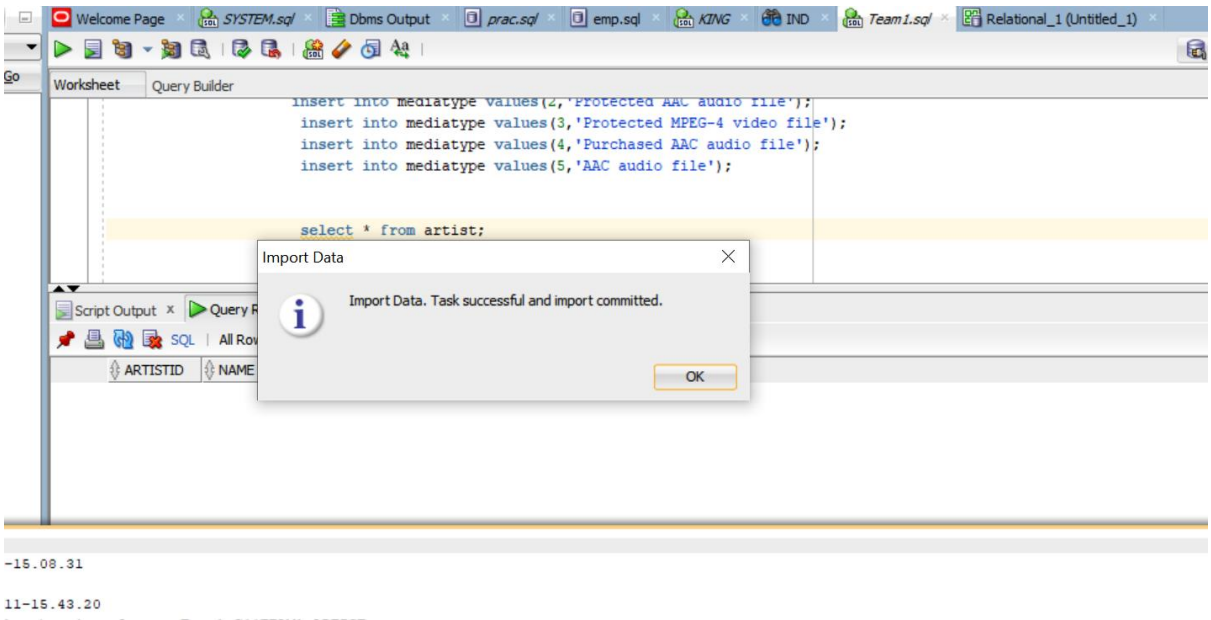
21.write different types of steps to import data into a table?

1. SQL developer method.

SQL developer method

Steps to import data from source data

Click on schema→click on table name→ right click → import→browse file →select source file→check the data and next→then select or matched the columns check data→ finish.

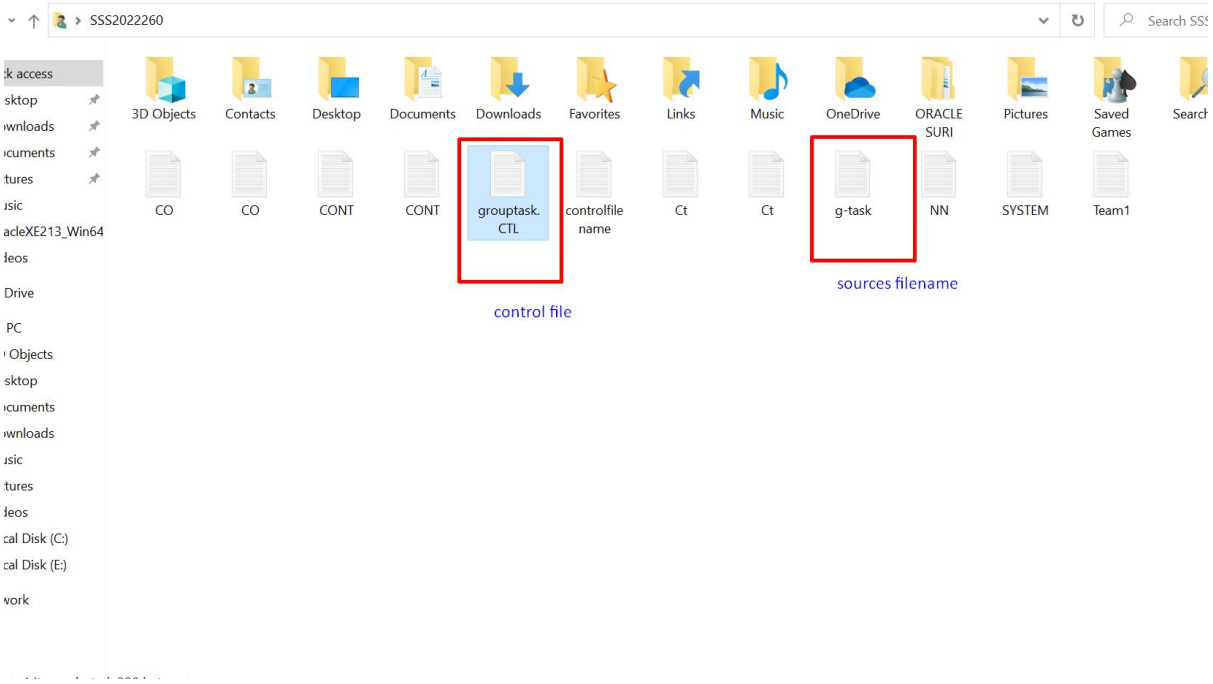


2. SQL star loader method.

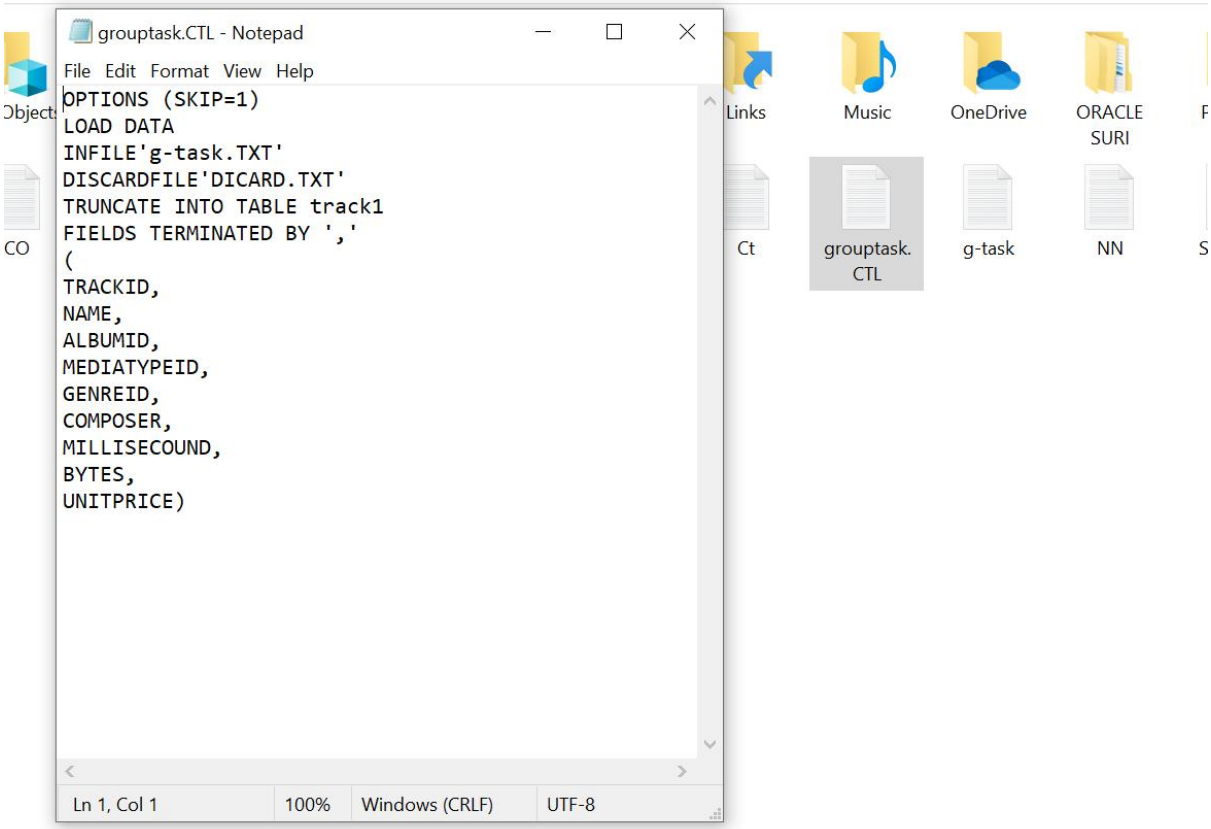
SQL star loader method

Steps followed by to insert data in sql star loader method

Create a files in admin path 1 is control file 2 is sources file

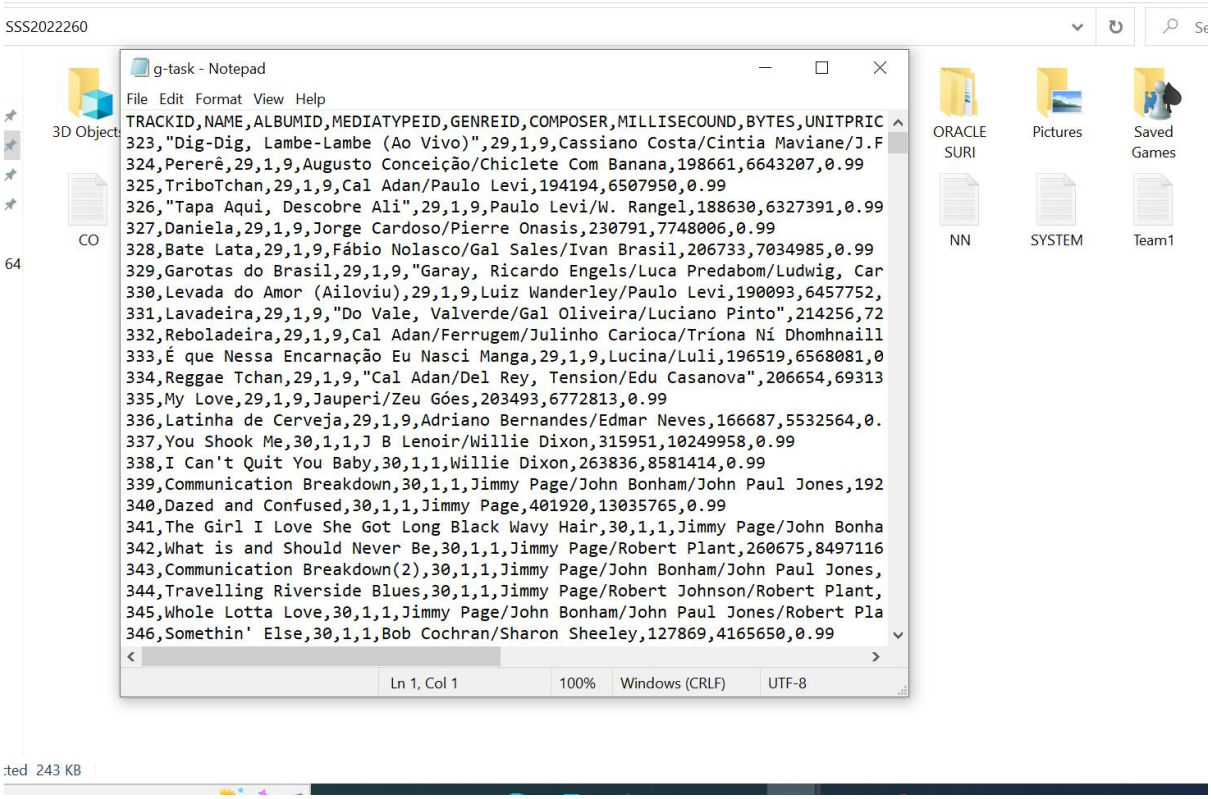


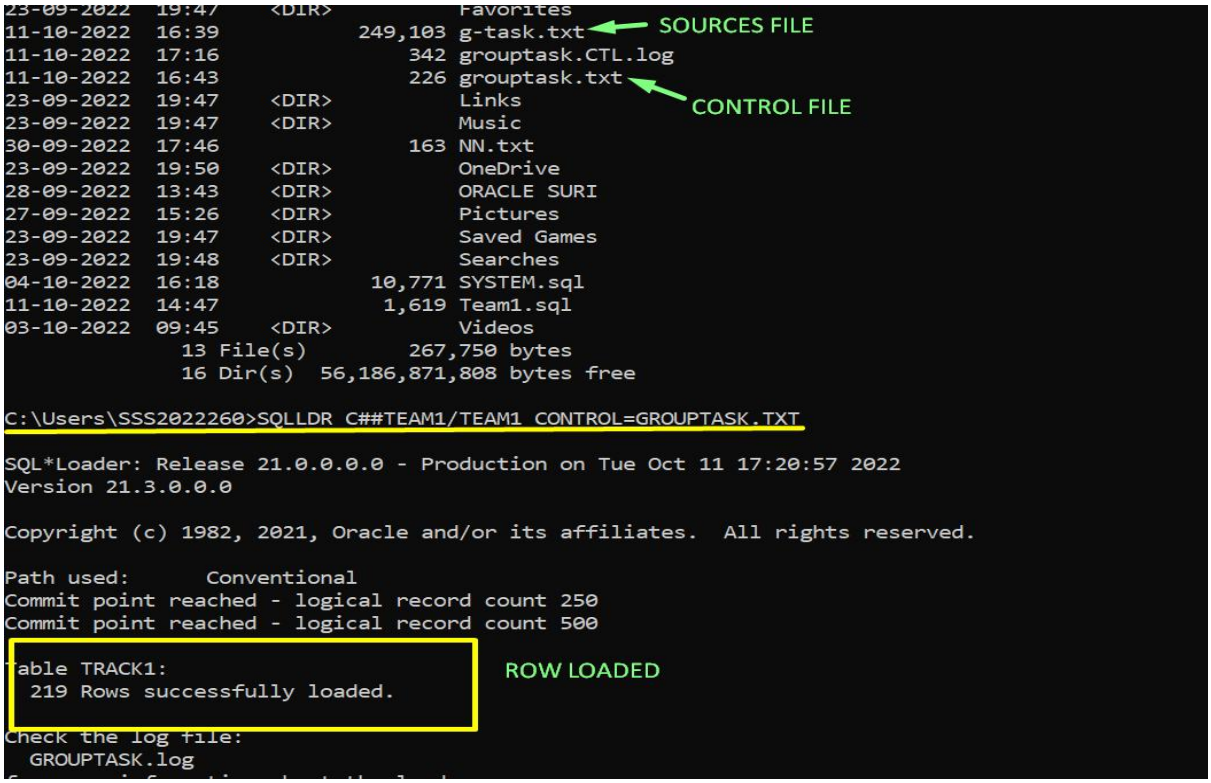
Control file



Sources file

This file contain data.





These are type to import data into database.

22.write a query to difference between the materialized view and force view?

MATERIALIZED VIEW	FORCE VIEW
The materialized view different compare to other views because it have own structure. The DML commands are not allowed. In case we do any modifies the base table doesn't affected.	It doesn't have own structure. It is baseless table. The DML commands are allowed. In case we do any modifies the base table also affected.

23.What is sub query how many types explain it?

Sub query:- Query within the query is called as a sub query.
The types of sub query,

1.Simple Sub Query
2.Co related Sub Query

1. Simple Sub Query :-

In simple sub query first inner query is executed independently, based on inner query value outer query is executed.

Outer query is depend on inner query but inner query doesn't depend on outer query. Syntax : select * from emp where empno= (select * from emp); Ex-1 : Display the employees who are working in research department?

Syntax:- Select empno,ename from emp where deptno=(select deptno from dept where dname='RESEARCH');

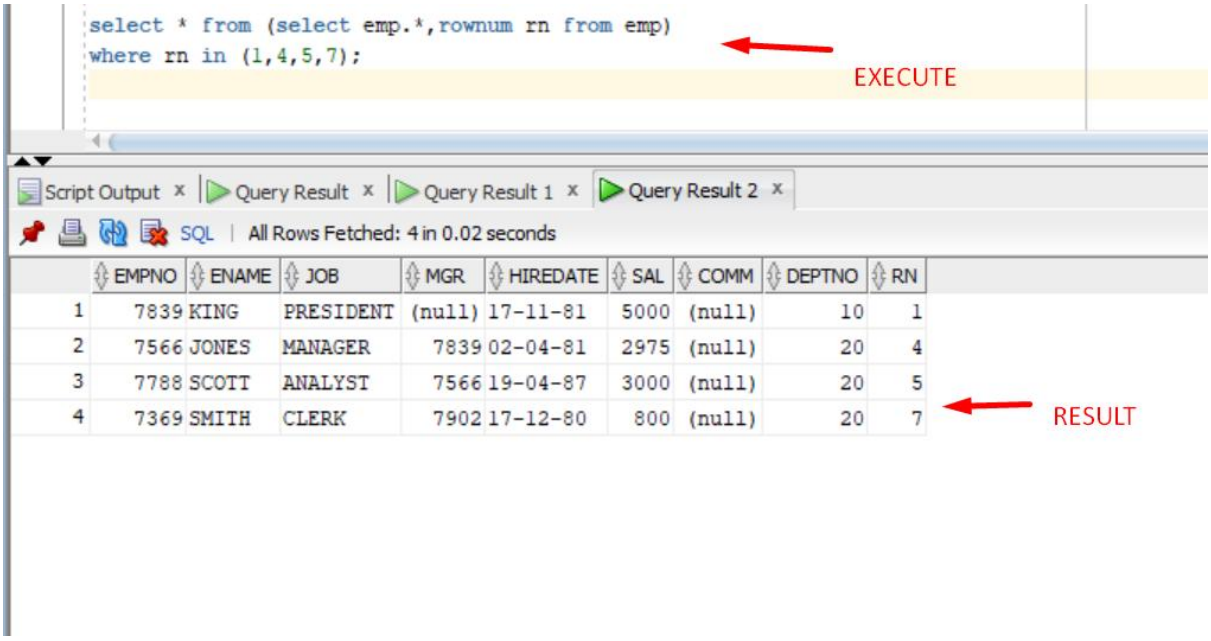
2. Co related Sub Query

In this query first outer query get executes based on outer query value inner query get executed and return a value and very finally based on the inner query value outer query value will be displayed.

Syntax : select * from emp e where 1=(select count(*) from emp where e.sal<=sal);

24. Write query to find random records like 1,4,5 and 7 in emp?

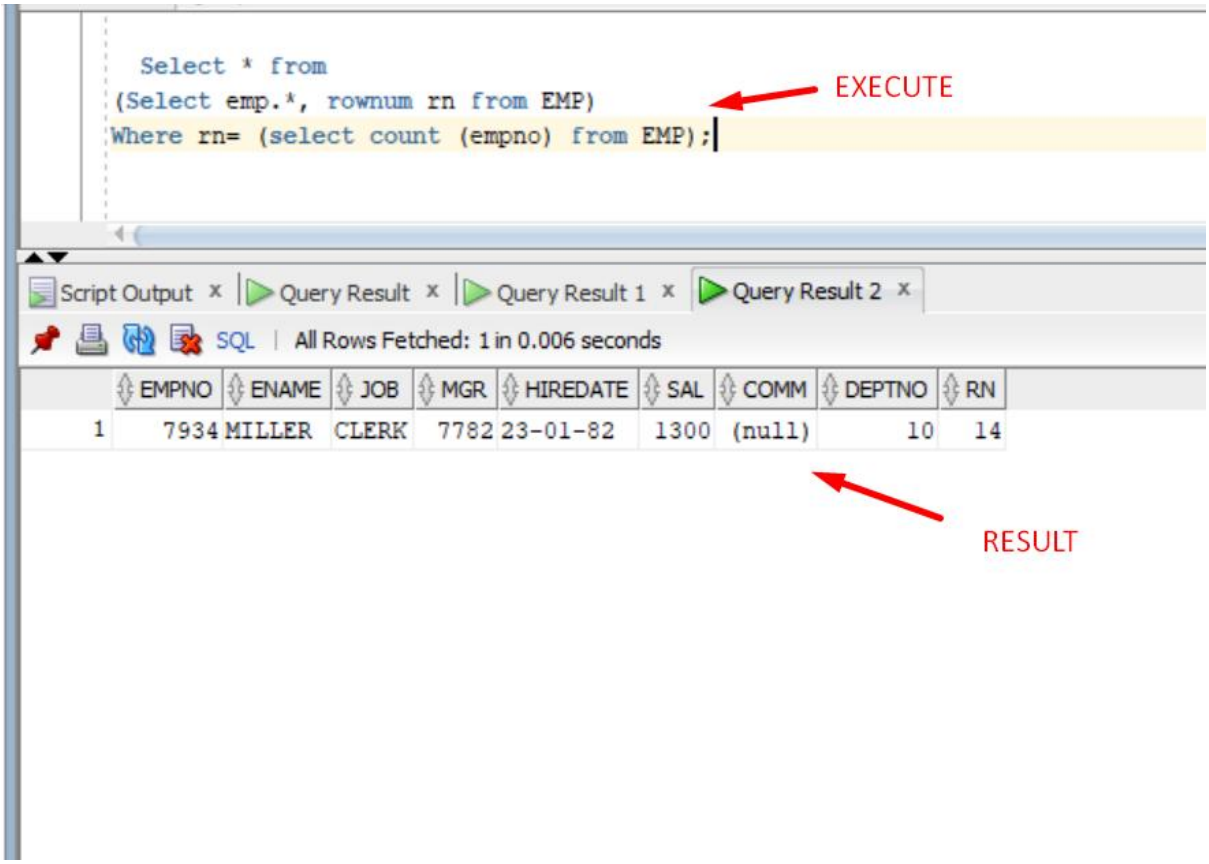
A. select * from (select emp.*,rownum rn from emp)
where rn in (1,4,5,7);



	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	RN
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10	1
2	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20	4
3	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20	5
4	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20	7

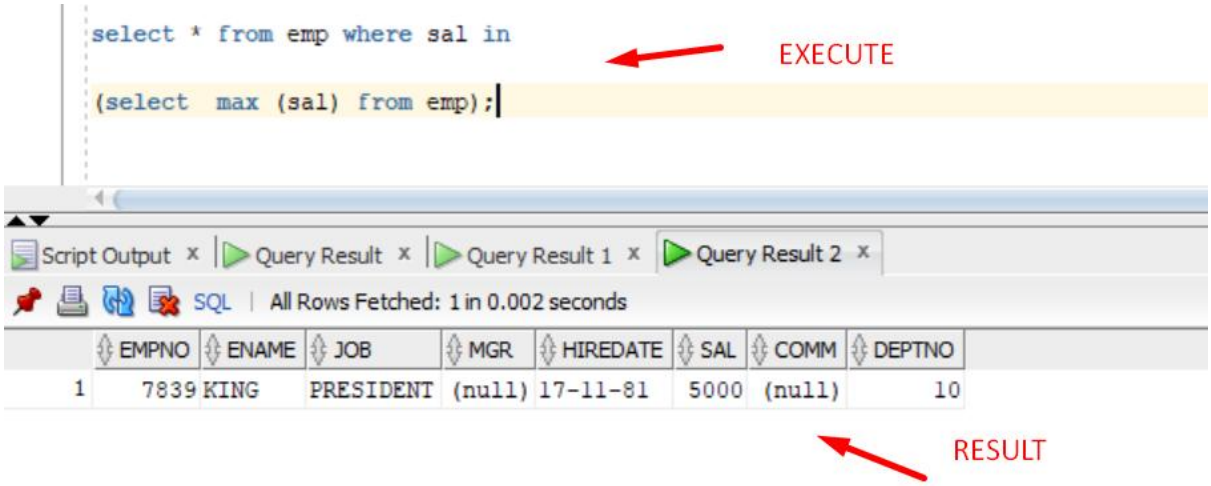
25. Write a query to get last record in EMP?

A. Select * from
(Select emp.*, rownum rn from EMP)
Where rn= (select count (empno) from EMP);



26. Display the employee details who are getting maximum salary?

A. select * from emp where sal in(select max (sal) from emp);



27.write about Sequence and explain it?

Sequence:-

It is used to create sequence on columns in a table.

While insert the data into tables we use the sequence.

All sequences are stored in all_sequences.

Syntax : create sequence sequence_name;

Create sequence sequence_name increment by 1 start with 1; Currval : it is used to insert current value.

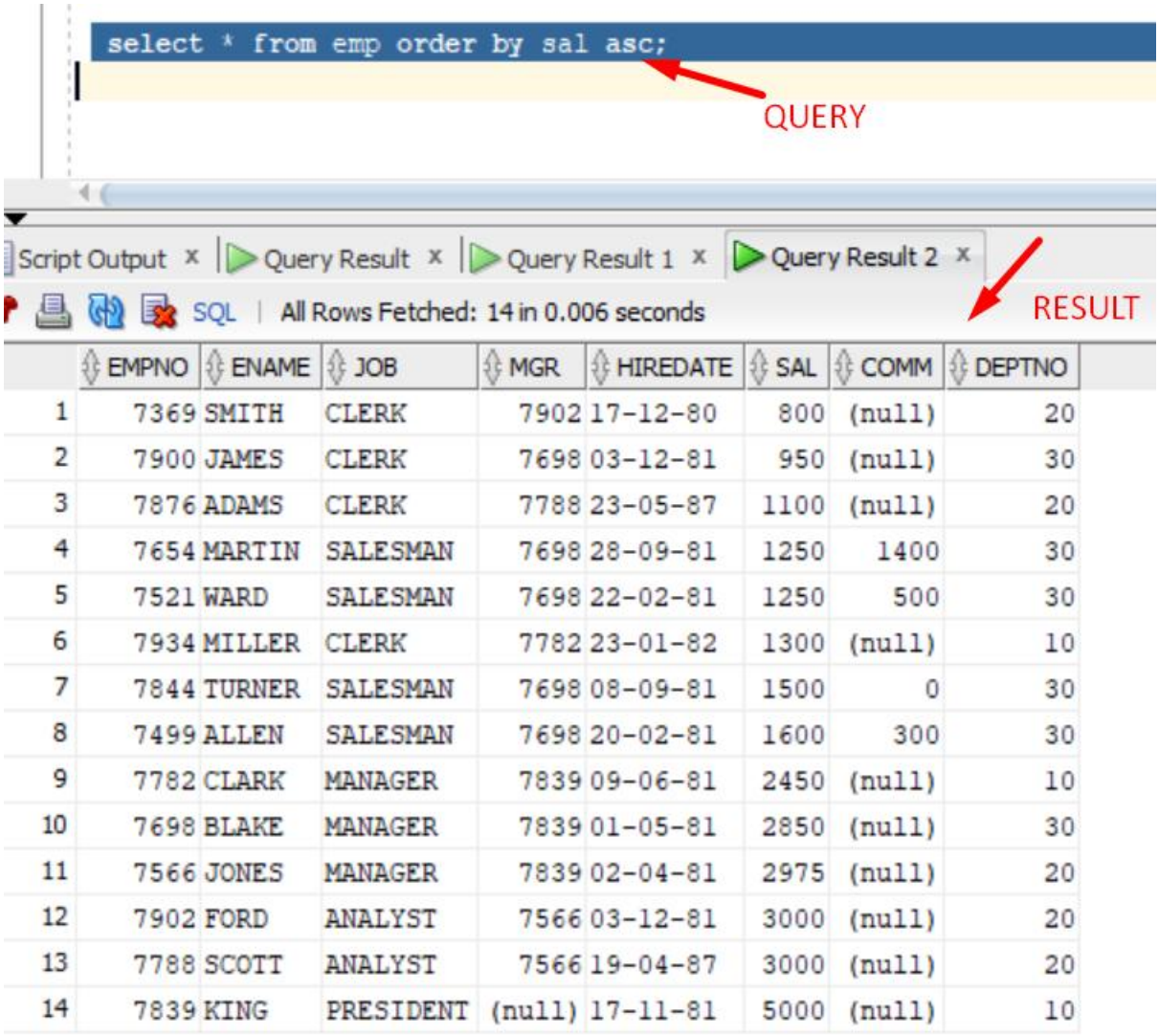
Nextval : it is used to insert next value

Create table t1 (sno number(5), cno number(5));

Insert into t1 values (seq1.currval, seq1.nextval);

28. List the emps in the asc order of their Salaries?

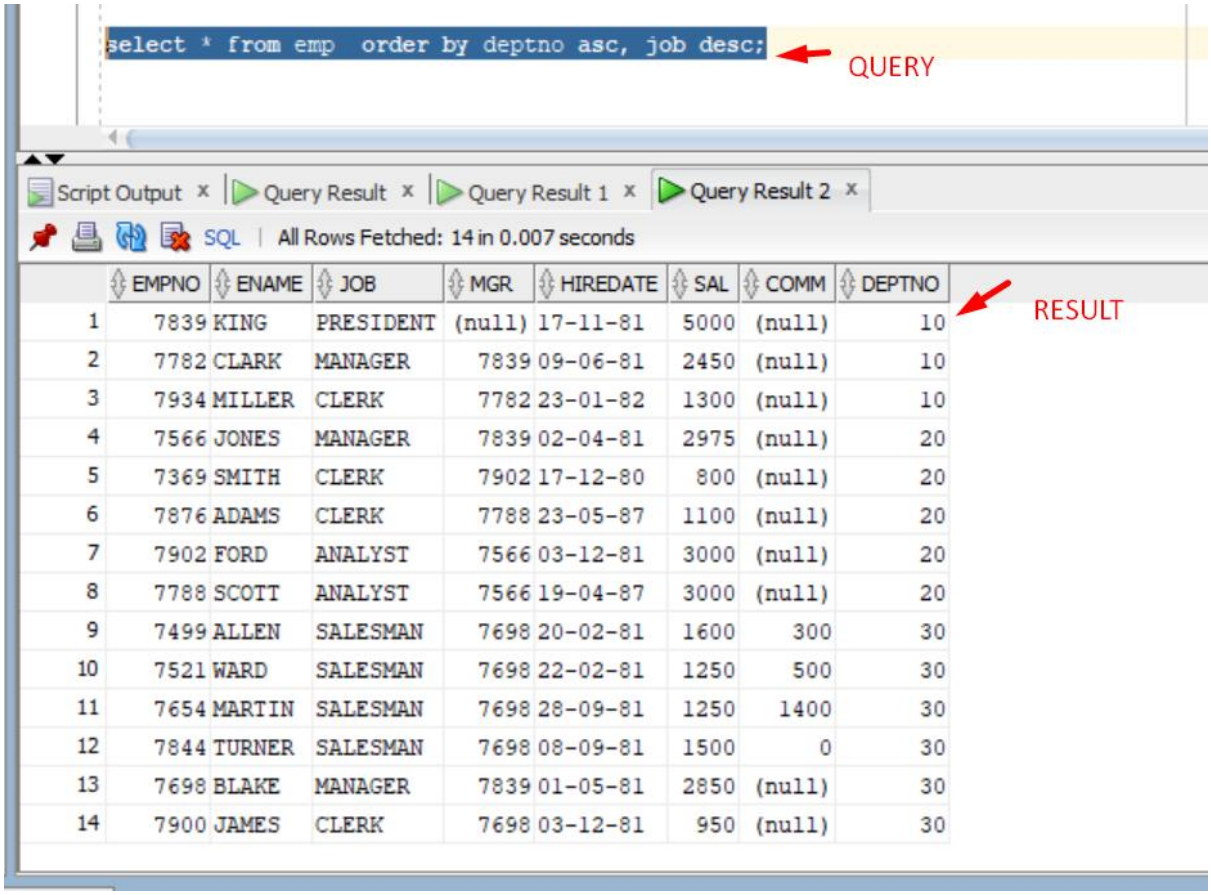
A. select * from emp order by sal asc;



	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
2	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30
3	7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20
4	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
5	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
6	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10
7	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30
8	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
9	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
10	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
11	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
12	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
13	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
14	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10

29. List the details of the emps in asc order of the Dptnos and desc of Jobs?

A. select * from emp order by deptno asc, job desc;



	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10
2	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
3	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10
4	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
5	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
6	7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20
7	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
8	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
9	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
10	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
11	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
12	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30
13	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
14	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30

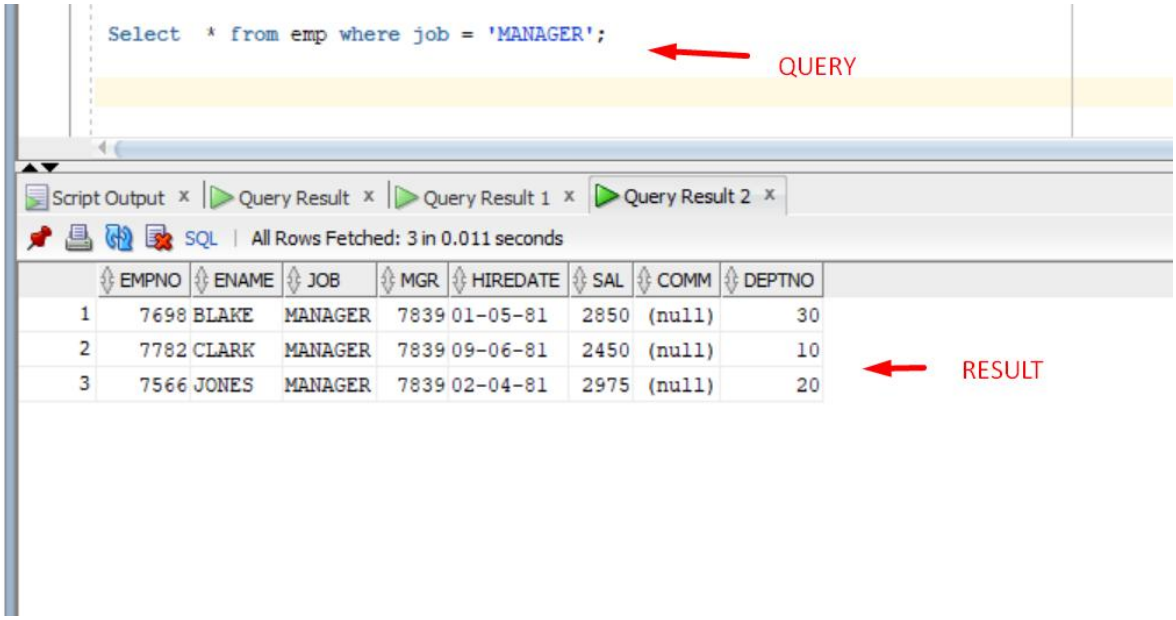
30. Display all the unique job groups in the descending order?

A. Select distinct job from emp order by job desc;

	JOB
1	SALESMAN
2	PRESIDENT
3	MANAGER
4	CLERK
5	ANALYST

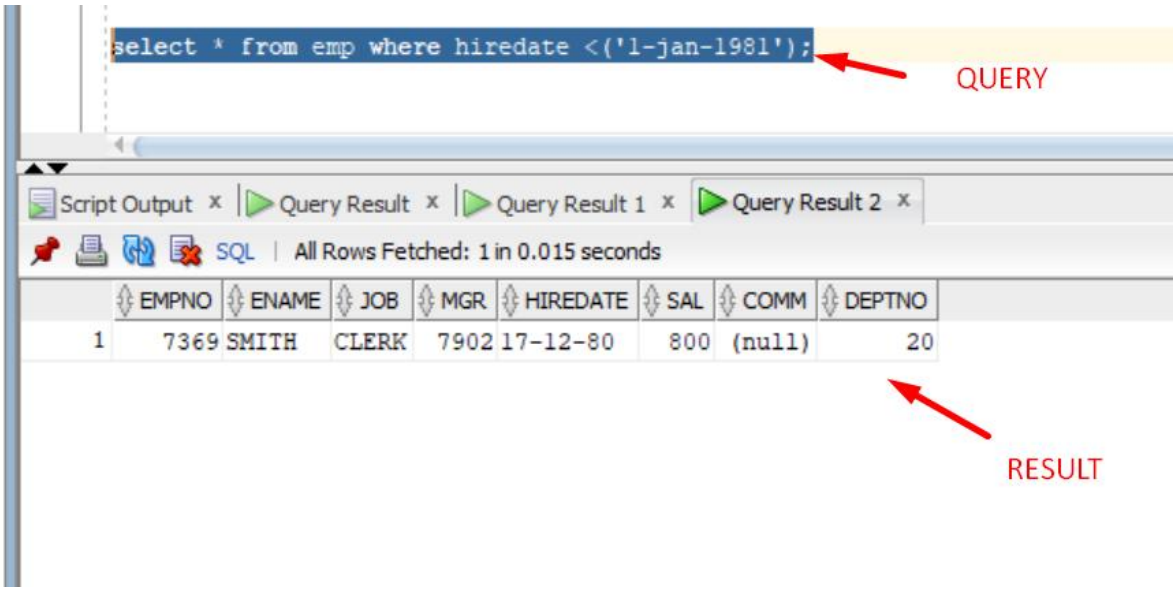
31. Display all the details of all ‘Mgrs’

A. Select * from emp where job = ‘MANAGER’;



32. List the emps who joined before 1981.

A. select * from emp where hiredate <('1-jan-1981');



33. List the Empno, Ename, Sal, Daily sal of all emps in the asc order of Annsal.

A. select Empno, Ename, Sal,trunc(sal/30) dsal,sal*12 asal from emp order by asal asc;

```
select Empno, Ename, Sal,trunc(sal/30) dsal,sal*12 asal   from emp  order by asal asc;
```

QUERY

Script Output | Query Result | Query Result 1 | Query Result 2

SQL | All Rows Fetched: 14 in 0.016 seconds

	EMPNO	ENAME	SAL	DSAL	ASAL
1	7369	SMITH	800	26	9600
2	7900	JAMES	950	31	11400
3	7876	ADAMS	1100	36	13200
4	7654	MARTIN	1250	41	15000
5	7521	WARD	1250	41	15000
6	7934	MILLER	1300	43	15600
7	7844	TURNER	1500	50	18000
8	7499	ALLEN	1600	53	19200
9	7782	CLARK	2450	81	29400
10	7698	BLAKE	2850	95	34200
11	7566	JONES	2975	99	35700
12	7902	FORD	3000	100	36000
13	7788	SCOTT	3000	100	36000
14	7839	KING	5000	166	60000

RESULT

34. Display the Empno, Ename, job, Hiredate, Exp of all Mgrs?

A. select Emp.*,to_char (sysdate,'yyyy')-to_char(hiredate,'yyyy') from emp where job = 'MANAGER';

```
select Emp.*,to_char (sysdate,'yyyy')-to_char(hiredate,'yyyy') from emp where job = 'MANAGER';
```

QUERY

Script Output | Query Result | Query Result 1 | Query Result 2

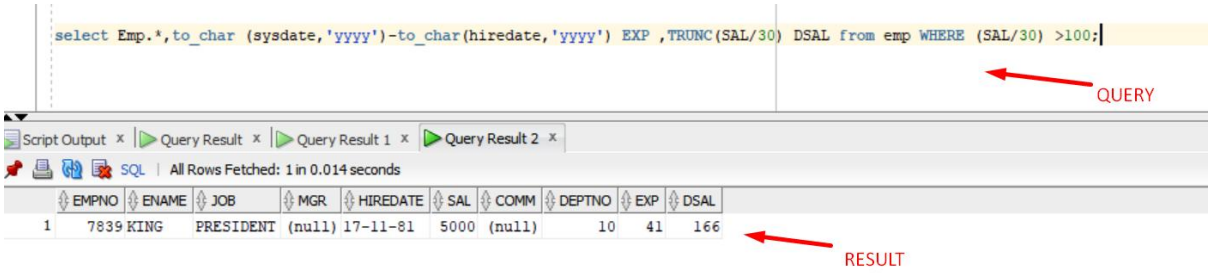
SQL | All Rows Fetched: 3 in 0.009 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	TO_CHAR(SYSDATE,'YYYY')-TO_CHAR(HIREDATE,'YYYY')
1	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30	41
2	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10	41
3	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20	41

RESULT

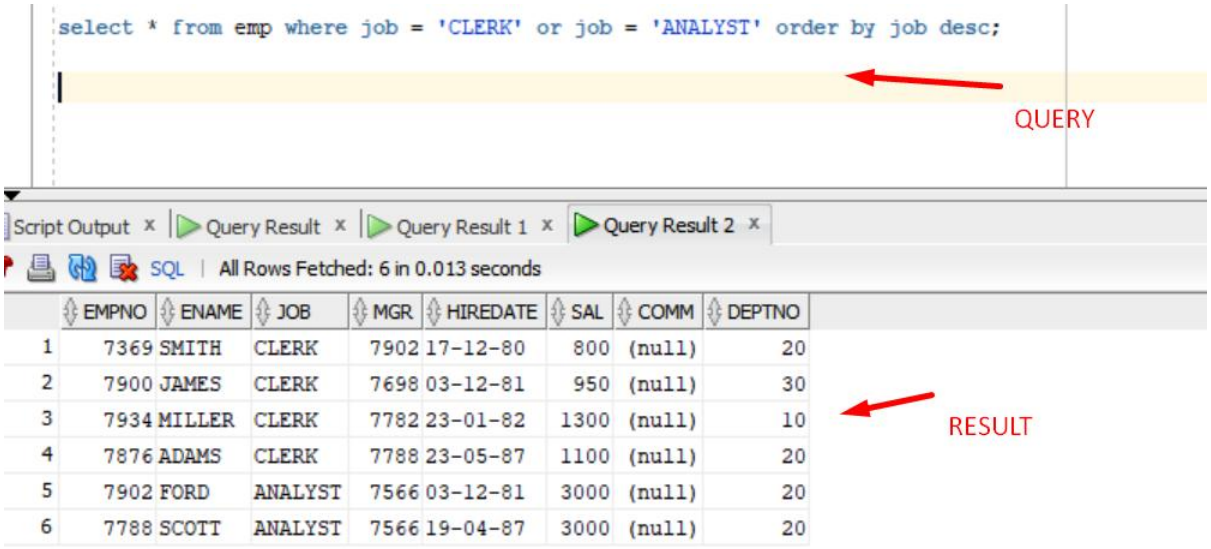
35. List the emps along with their Exp and Daily Sal is more than Rs.100?

A. select Emp.*,to_char (sysdate,'yyyy')-to_char(hiredate,'yyyy') EXP ,TRUNC(SAL/30) DSAL from emp WHERE (SAL/30) >100;



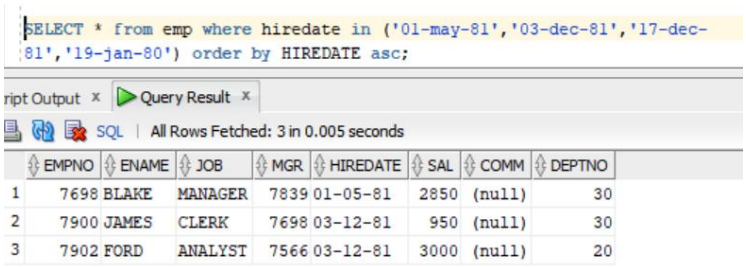
36. List the emps who are either 'CLERK' or 'ANALYST' in the Desc order?

A. select * from emp where job = 'CLERK' or job = 'ANALYST' order by job desc;



37. List the emps who joined on 1-MAY-81,3-DEC-81,17-DEC-81,19-JAN-80 in ascorder of seniority.

A. select * from emp where hiredate in ('01-may-81','31-dec-81','17-dec-81','19-jan-80')order by hiredate asc;



```
SELECT * from emp where hiredate in ('01-may-81','03-dec-81','17-dec-
81','19-jan-80') order by HIREDATE asc;
```

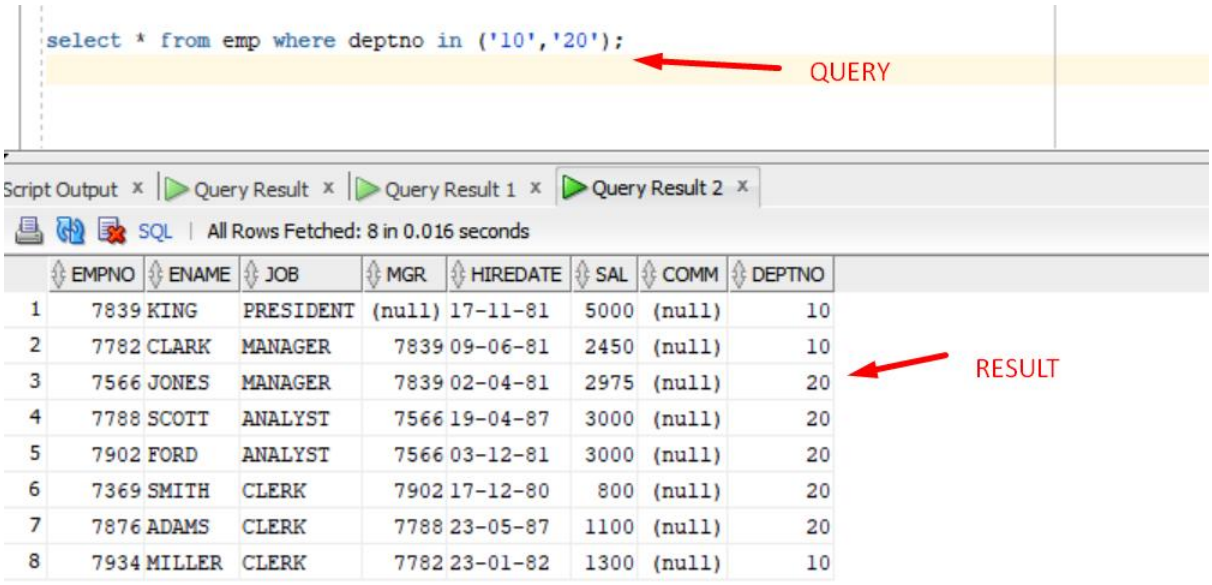
ript Output × Query Result ×

SQL | All Rows Fetched: 3 in 0.005 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
2	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30
3	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20

38. List the emp who are working for the Deptno 10 or20?

A. select * from emp where deptno in ('10','20');



```
select * from emp where deptno in ('10','20');
```

QUERY

Script Output × Query Result × Query Result 1 × Query Result 2 ×

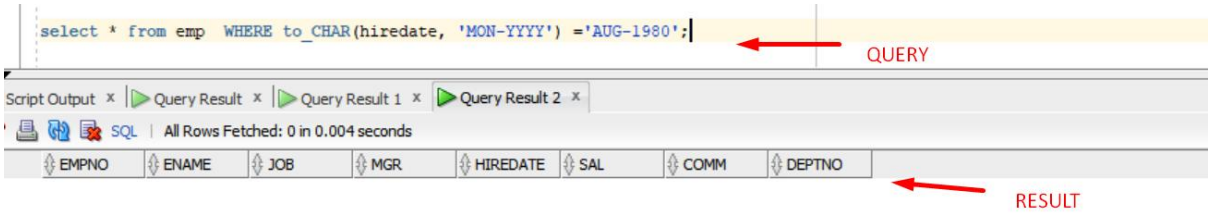
SQL | All Rows Fetched: 8 in 0.016 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10
2	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
3	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
4	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
5	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
6	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
7	7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20
8	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10

RESULT

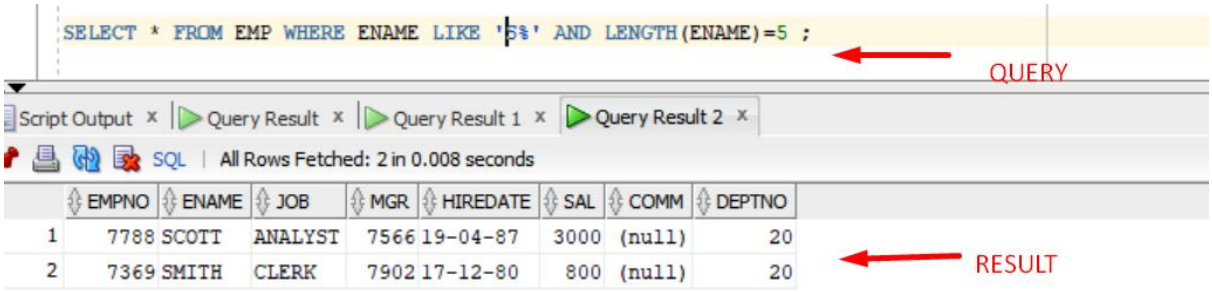
39. List the emps who are joined in the month of Aug 1980?

A. select * from emp WHERE to_CHAR(hiredate, 'MON-YYYY') ='AUG-1980';



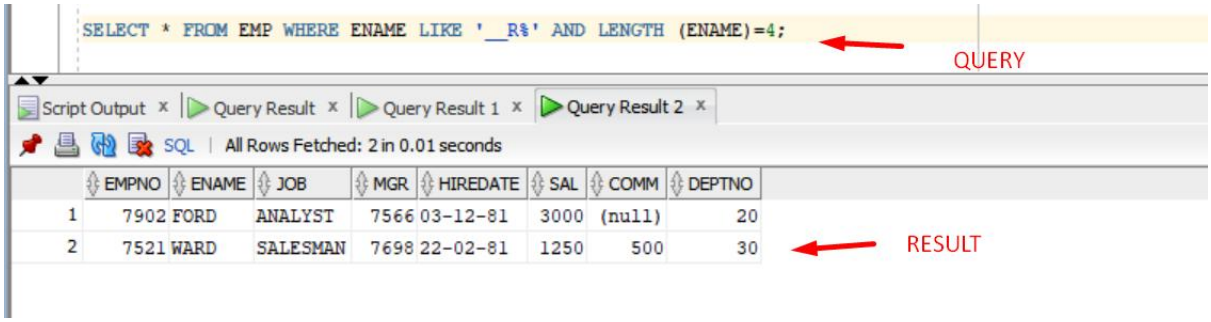
40. List the Enames those are starting with ‘S’ and with five characters?

A.SELECT * FROM EMP WHERE ENAME LIKE 'S%' AND LENGTH(ENAME)=5 ;



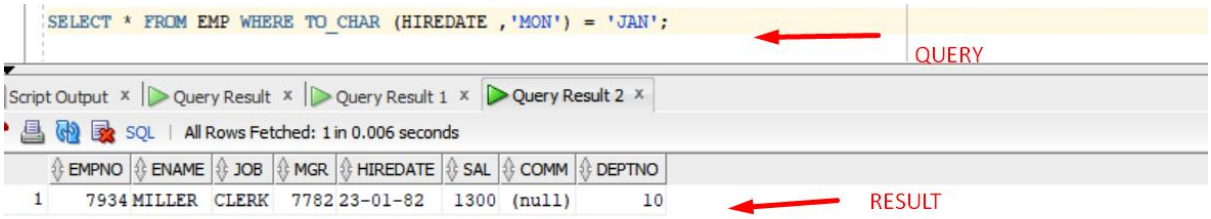
41. List the emps those are having four chars and third character must be ‘r’?

A. SELECT * FROM EMP WHERE ENAME LIKE '__R%' AND LENGTH (ENAME)=4;



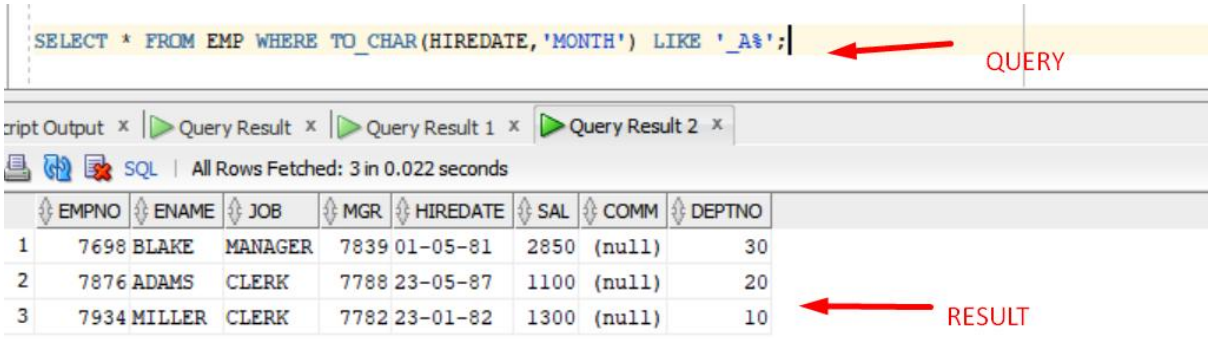
42. List the emps who joined in January?

A. SELECT * FROM EMP WHERE TO_CHAR (HIREDATE ,'MON') = 'JAN';



43. List the emps who joined in the month of which second character is ‘a’?

A. SELECT * FROM EMP WHERE TO_CHAR(HIREDATE,'MONTH') LIKE '_A%';



44. List the emps whose Sal is four-digit number ending with Zero?

A. SELECT * FROM EMP WHERE SAL LIKE '%0' AND LENGTH (SAL)=4;

```
SELECT * FROM EMP WHERE SAL LIKE '%0' AND LENGTH (SAL)=4;
```

QUERY

Script Output | Query Result | Query Result 1 | Query Result 2

SQL | All Rows Fetched: 11 in 0.007 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10
2	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
3	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
4	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
5	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
6	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
7	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
8	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
9	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30
10	7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20
11	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10

RESULT

45.List the emps whose names having a character set ‘ll’ together?

A. SELECT * FROM EMP WHERE ENAME LIKE '%LL%';

```
SELECT * FROM EMP  WHERE ENAME LIKE '%LL%';
```

QUERY

Script Output | Query Result | Query Result 1 | Query Result 2

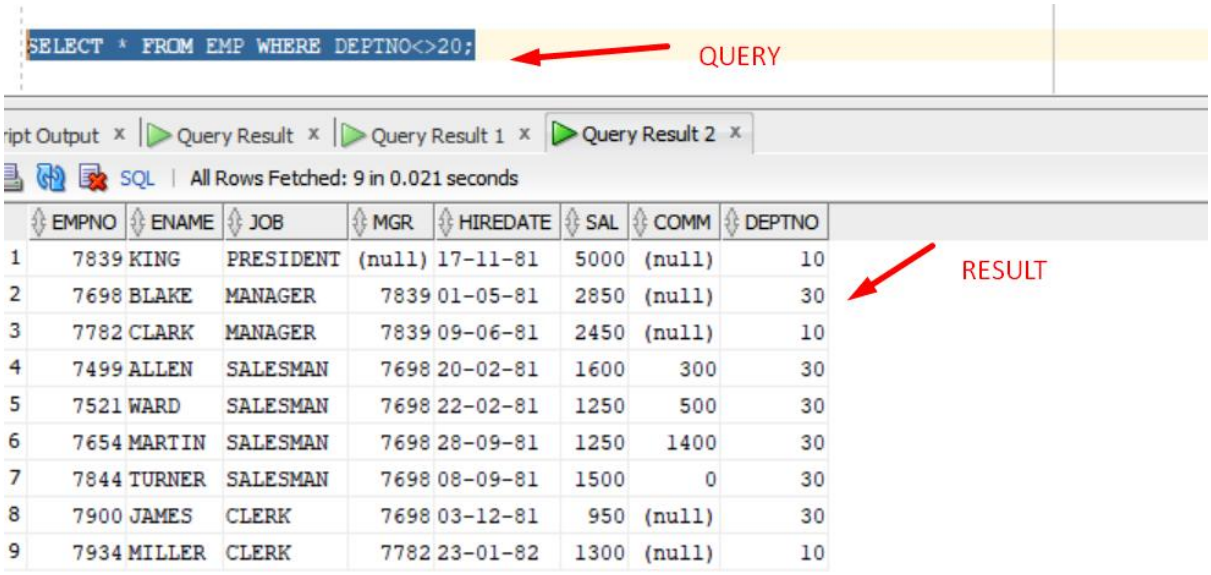
SQL | All Rows Fetched: 2 in 0.015 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
2	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10

RESULT

46. List the emps who does not belong to Deptno 20?

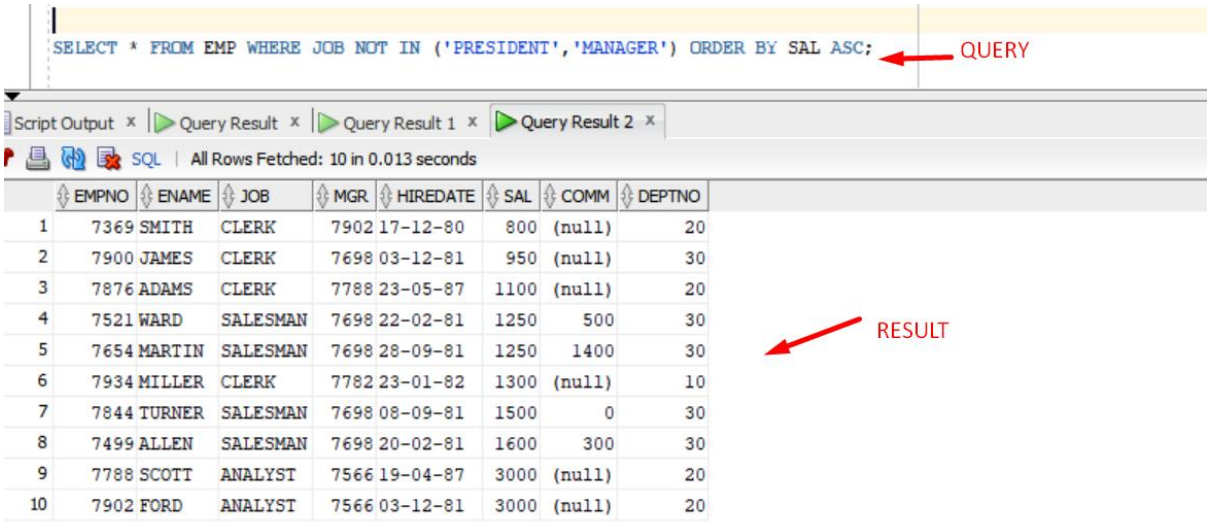
A. SELECT * FROM EMP WHERE DEPTNO<>20;



	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10
2	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
3	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
4	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
5	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
6	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
7	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30
8	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30
9	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10

47. List all the emps except ‘PRESIDENT’ & ‘MGR” in asc order of Salaries?

A. SELECT * FROM EMP WHERE JOB NOT IN ('PRESIDENT','MANAGER') ORDER BY SAL ASC;



	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
2	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30
3	7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20
4	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
5	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
6	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10
7	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30
8	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
9	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
10	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20

48. List the emps who joined in any year but not belongs to the month of March?

A. SELECT * FROM EMP WHERE TO_CHAR (HIREDATE,'MONTH')<>'MARCH';

```
SELECT * FROM EMP WHERE TO_CHAR  (HIREDATE,'MONTH')<>'MARCH';
```

QUERY

Script Output | Query Result | Query Result 1 | Query Result 2

SQL | All Rows Fetched: 14 in 0.02 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10
2	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
3	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
4	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
5	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
6	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
7	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
8	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
9	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
10	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
11	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30
12	7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20
13	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30
14	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10

RESULT

49.List the emps of Deptno 30 or 10 joined in the year 1981?

A. SELECT * FROM EMP WHERE TO_CHAR(HIREDATE,'YYYY') = 1981 AND DEPTNO IN (30,10);

```
SELECT * FROM EMP WHERE TO_CHAR(HIREDATE,'YYYY') = 1981 AND DEPTNO IN (30,10);
```

QUERY

Script Output | Query Result | Query Result 1 | Query Result 2

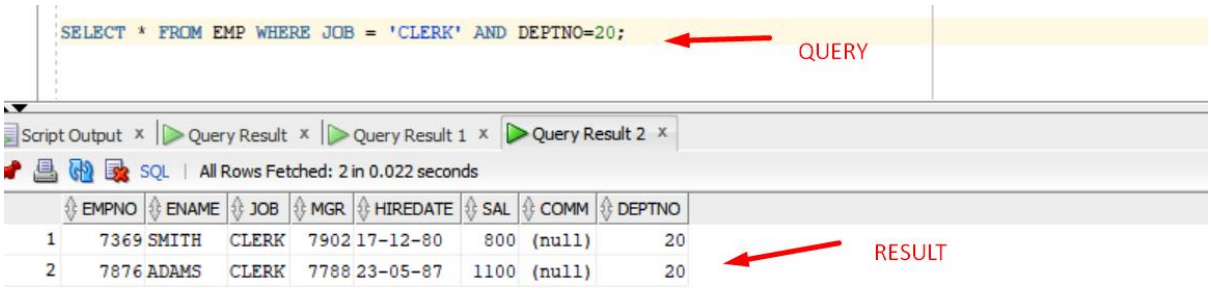
SQL | All Rows Fetched: 8 in 0.021 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10
2	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
3	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
4	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
5	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
6	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
7	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30
8	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30

RESULT

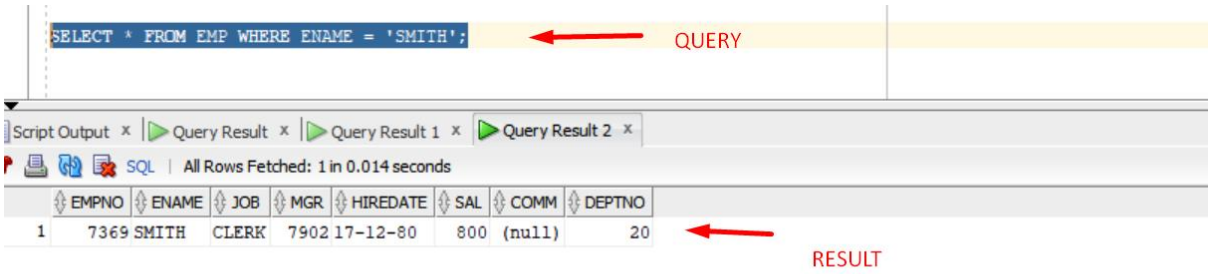
50. List all the Clerks of Deptno 20?

A.SELECT * FROM EMP WHERE JOB = 'CLERK' AND DEPTNO=20;



51. Display the details of SMITH?

A.SELECT * FROM EMP WHERE ENAME = 'SMITH';



52. List the total information of EMP table along with DNAME and Loc of all theemps Working Under ‘ACCOUNTING’ & ‘RESEARCH’ in the asc Deptno?

A. SELECT E.*,D.* FROM EMP E,DEPT D WHERE D.DNAME IN ('ACCOUNTING','RESEARCH') ORDER BY E.DEPTNO ASC;

```
SELECT E.*,D.* FROM EMP E,DEPT D WHERE D.DNAME IN ('ACCOUNTING','RESEARCH') ORDER BY E.DEPTNO ASC;
```

QUERY

Script Output | Query Result | Query Result 1 | Query Result 2

SQL | All Rows Fetched: 28 in 0.003 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	DEPTNO_1	DNAME	LOC
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10	20	RESEARCH	DALLAS
2	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10	10	ACCOUNTING	NEW YORK
3	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10	10	ACCOUNTING	NEW YORK
4	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10	10	ACCOUNTING	NEW YORK
5	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10	20	RESEARCH	DALLAS
6	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10	20	RESEARCH	DALLAS
7	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20	20	RESEARCH	DALLAS
8	7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20	10	ACCOUNTING	NEW YORK
9	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20	10	ACCOUNTING	NEW YORK
10	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20	20	RESEARCH	DALLAS
11	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20	20	RESEARCH	DALLAS
12	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20	20	RESEARCH	DALLAS
13	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20	10	ACCOUNTING	NEW YORK
14	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20	10	ACCOUNTING	NEW YORK

RESULT

53. List the Empno, Ename, Sal, Dname of all the ‘MGRS’ and ‘ANALYST’ working in New York, Dallas with an exp more than 7 years without receiving theComm asc order of Loc?

A. SELECT * FROM EMP E,DEPT D WHERE E.DEPTNO=D.DEPTNO AND E.JOB IN('MANAGER','ANALYST') AND D.LOC IN ('NEW YORK','DALLAS')
AND TO_CHAR(SYSDATE,'YYYY')-TO_CHAR (HIREDATE,'YYYY')>7 ;

```
SELECT * FROM EMP E,DEPT D WHERE  E.DEPTNO=D.DEPTNO AND E.JOB IN('MANAGER','ANALYST') AND D.LOC IN ('NEW YORK','DALLAS')
AND TO_CHAR(SYSDATE,'YYYY')-TO_CHAR (HIREDATE,'YYYY')>7 ;
```

QUERY

Script Output | Query Result | Query Result 1 | Query Result 2

SQL | All Rows Fetched: 4 in 0.03 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	DEPTNO_1	DNAME	LOC
1	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10	10	ACCOUNTING	NEW YORK
2	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20	20	RESEARCH	DALLAS
3	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20	20	RESEARCH	DALLAS
4	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20	20	RESEARCH	DALLAS

RESULT

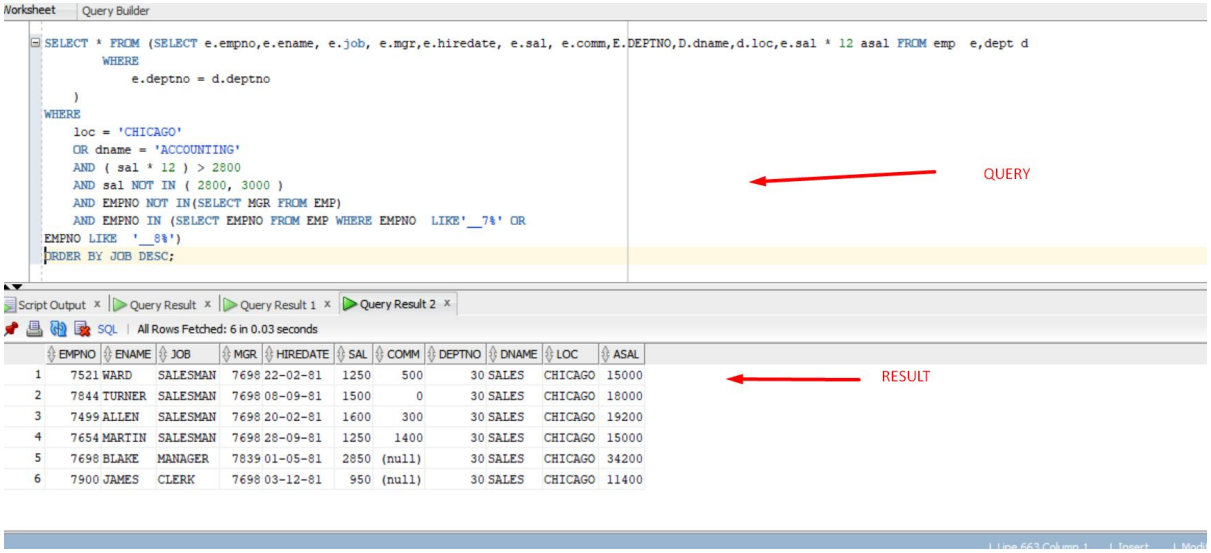
54. Display the Empno, Ename, Sal, Dname, Loc, Deptno, Job of all emps working atCJICAGO or working for ACCOUNTING dept with Ann Sal>28000, but the Sal should not be=3000 or 2800 who doesn’t belong to the Mgr and whose no is having a digit ‘7’ or ‘8’ in 3rd position in the asc order of Deptno

and desc orderof job.

```
A.SELECT
  *
FROM
  (
    SELECT
      e.empno,
      e.ename,
      e.job,
      e.mgr,
      e.hiredate,
      e.sal,
      e.comm,
      E.DEPTNO,
      d.dname,
      d.loc,
      e.sal * 12 asal
    FROM
      emp  e,
      dept d
    WHERE
      e.deptno = d.deptno
  )
WHERE
  loc = 'CHICAGO'
  OR dname = 'ACCOUNTING'
  AND ( sal * 12 ) > 2800
  AND sal NOT IN ( 2800, 3000 )
  AND EMPNO NOT IN(SELECT MGR FROM EMP)
  AND EMPNO IN (SELECT EMPNO FROM EMP WHERE EMPNO  LIKE'__7%' OR
```

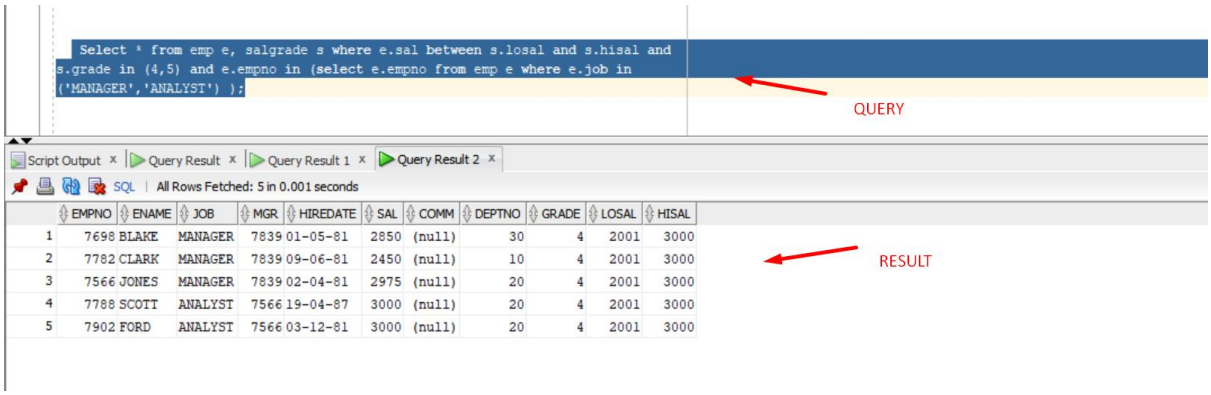
EMPNO LIKE '__8%')

ORDER BY JOB DESC;



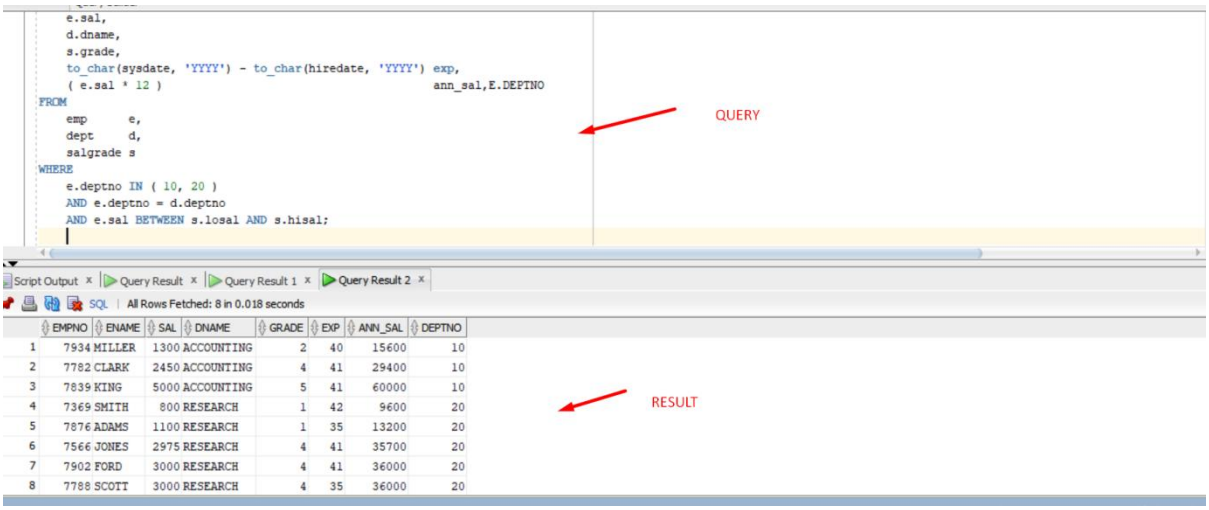
55.Display all Grade 4,5 Analyst and Mgr?

A. Select * from emp e, salgrade s where e.sal between s.losal and s.hisal and s.grade in (4,5) and e.empno in (select e.empno from emp e where e.job in ('MANAGER','ANALYST'));



56. List the Empno, Ename, Sal, Dname, Grade, Exp, and Ann Sal of emps working for Dept10 or20?

A. SELECT
e.empno,
e.ename,
e.sal,
d.dname,
s.grade,
to_char(sysdate, 'YYYY') - to_char(hiredate, 'YYYY') exp,
(e.sal * 12) ann_sal,E.DEPTNO
FROM
emp e,
dept d,
salgrade s
WHERE
e.deptno IN (10, 20)
AND e.deptno = d.deptno
AND e.sal BETWEEN s.losal AND s.hisal;



	EMPNO	ENAME	SAL	DNAME	GRADE	EXP	ANN_SAL	DEPTNO
1	7934	MILLER	1300	ACCOUNTING	2	40	15600	10
2	7782	CLARK	2450	ACCOUNTING	4	41	29400	10
3	7839	KING	5000	ACCOUNTING	5	41	60000	10
4	7369	SMITH	800	RESEARCH	1	42	9600	20
5	7876	ADAMS	1100	RESEARCH	1	35	13200	20
6	7566	JONES	2975	RESEARCH	4	41	35700	20
7	7902	FORD	3000	RESEARCH	4	41	36000	20
8	7788	SCOTT	3000	RESEARCH	4	35	36000	20

57. List all the information of emp with Loc and the Grade of all the emps belong to the Grade range from 2 to 4 working at the Dept those are not starting with char set ‘OP’ and not ending with ‘S’ with the designation having a char ‘a’ anywhere joined in the year 1981 but not in the month of Mar or Sep and Sal not end with ‘00’ in the asc order of Grades?

A. select e.empno,e.ename,d.loc,s.grade,e.sal from emp e ,dept d,salgrade s

where e.deptno = d.deptno

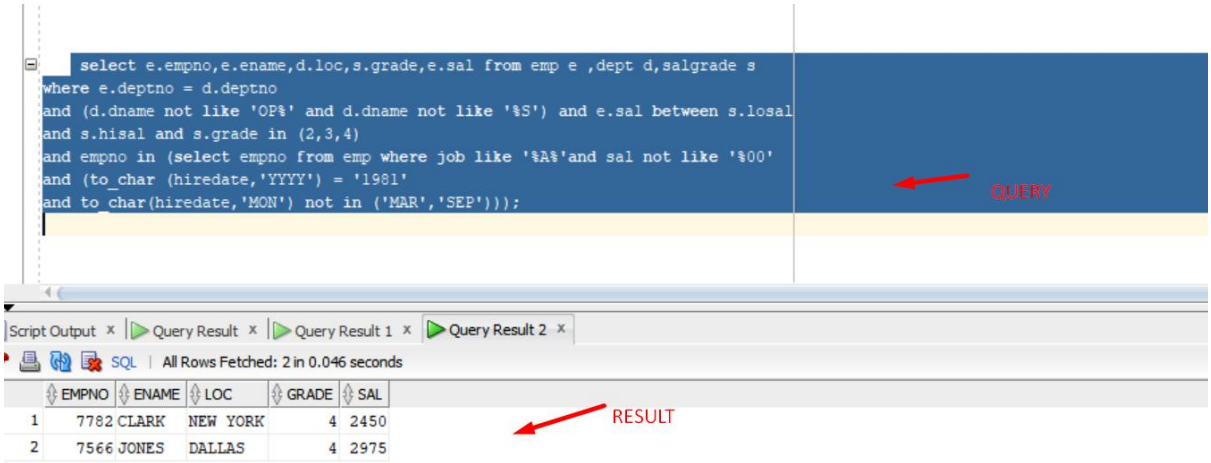
and (d.dname not like 'OP%' and d.dname not like '%S') and e.sal between s.losal

and s.hisal and s.grade in (2,3,4)

and empno in (select empno from emp where job like '%A%'and sal not like '%00'

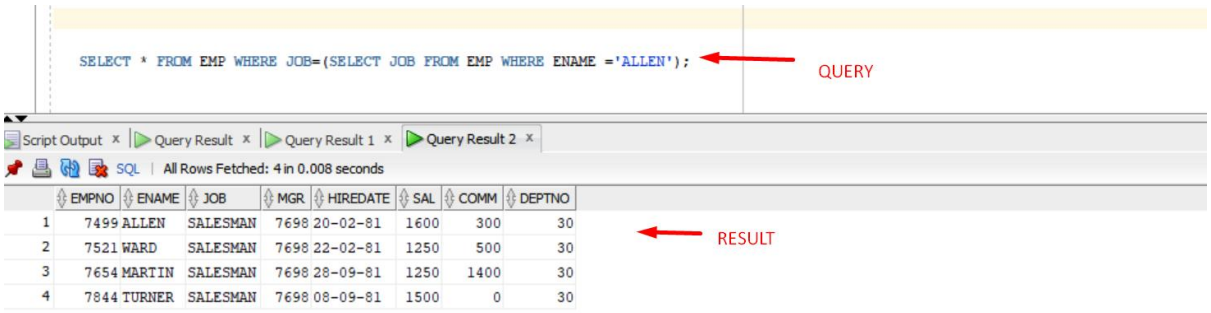
and (to_char (hiredate,'YYYY') = '1981'

and to_char(hiredate,'MON') not in ('MAR','SEP')));



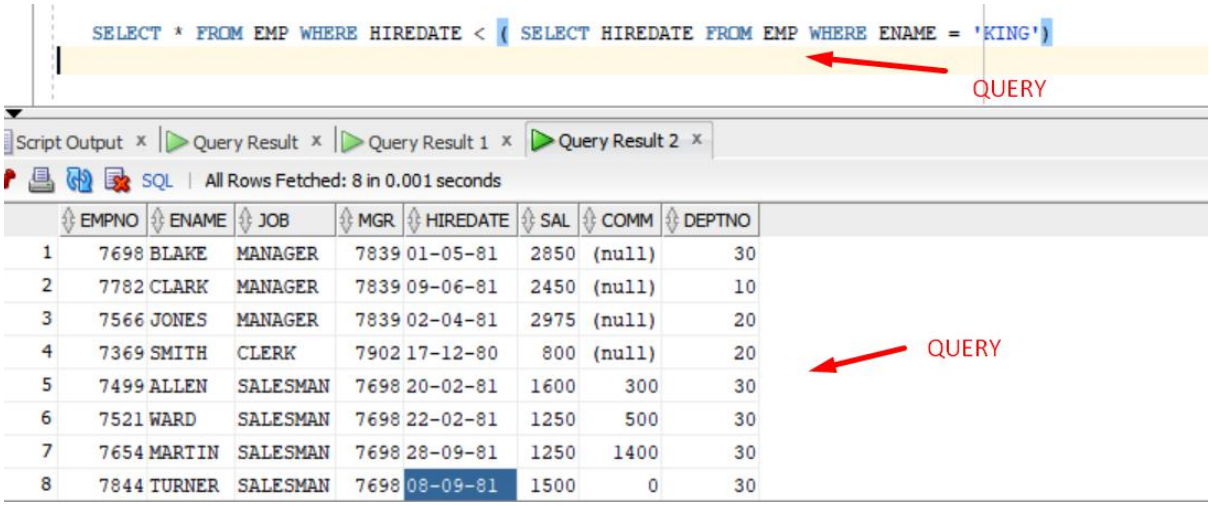
58. List the emps whose Jobs are same as ALLEN?

A. SELECT * FROM EMP WHERE JOB=(SELECT JOB FROM EMP WHERE ENAME ='ALLEN');



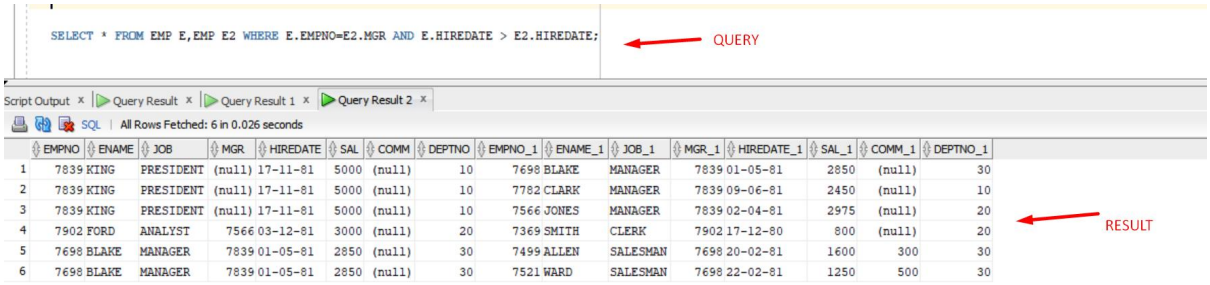
59. List the emps who are senior to King?

A.SELECT * FROM EMP WHERE HIREDATE < (SELECT HIREDATE FROM EMP WHERE ENAME = 'KING');



60. List the Emps who are senior to their own MGRS?

A. SELECT * FROM EMP E,EMP E2 WHERE E.EMPNO=E2.MGR AND E.HIREDATE > E2.HIREDATE;



61. List the Emps of Deptno 20 whose Jobs are same as Deptno10.

A. SELECT*FROM EMP WHERE DEPTNO=20 AND JOB IN (SELECT JOB FROM EMP WHERE DEPTNO=10);

```
40
41  SELECT*FROM EMP WHERE DEPTNO=20 AND
42  JOB IN (SELECT JOB FROM EMP WHERE DEPTNO=10);
43
```

Script Output | Query Result

SQL | All Rows Fetched: 3 in 0.002 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
2	7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20
3	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20

62. List the Emps whose Sal is same as FORD or SMITH in desc order of Sal.A)

A. SELECT*FROM EMP WHERE SAL IN (SELECT SAL FROM EMP WHERE ENAME IN('SMITH','FORD'))ORDER BY SAL DESC;

```
146
147  SELECT*FROM EMP WHERE SAL IN
148  (SELECT SAL FROM EMP WHERE ENAME IN('SMITH','FORD'))ORDER BY SAL DESC;
149
```

Script Output | Query...

SQL | All Rows Fetched: 3 in 0.015 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
2	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
3	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20

63. List the emps Whose Jobs are same as MILLER or Sal is more than ALLEN.

A. SELECT*FROM EMP WHERE JOB IN (SELECT JOB FROM EMP WHERE ENAME='MILLER') OR SAL>(SELECT SAL FROM EMP WHERE ENAME='ALLEN');

```
SELECT*FROM EMP WHERE JOB IN (SELECT JOB FROM EMP WHERE ENAME='MILLER')
OR SAL>(SELECT SAL FROM EMP WHERE ENAME='ALLEN');
```

Script Output × Query Result ×

SQL | All Rows Fetched: 10 in 0.04 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10
2	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
3	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
4	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
5	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
6	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
7	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
8	7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20
9	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30
10	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10

64. List the Emps whose Sal is > the total remuneration of the SALESMAN.

A. SELECT*FROM EMP WHERE SAL > (SELECT SUM(NVL2(COMM,SAL+COMM,SAL))FROM EMP WHERE JOB='SALESMAN');

```
SELECT*FROM EMP WHERE
SAL > (SELECT SUM(NVL2(COMM,SAL+COMM,SAL))FROM EMP WHERE JOB='SALESMAN');
```

cript Output × Query Result ×

SQL | All Rows Fetched: 0 in 0.009 seconds

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO

65. List the emps who are senior to BLAKE working at CHICAGO & BOSTON.

A. SELECT*FROM EMP E,DEPT D WHERE D.LOC IN('CHICAGO','BOSTON') AND E.DEPTNO=D.DEPTNO AND E.HIREDATE <(SELECT E.HIREDATE FROM EMP E WHERE E.ENAME='BLAKE');

```
SELECT*FROM EMP E,DEPT D WHERE D.LOC IN('CHICAGO','BOSTON')
AND E.DEPTNO=D.DEPTNO
AND E.HIREDATE <(SELECT E.HIREDATE FROM EMP E WHERE E.ENAME='BLAKE');
```

Query Result | SQL | All Rows Fetched: 2 in 0.002 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	DEPTNO_1	DNAME	LOC
1	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30	30	SALES	CHICAGO
2	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30	30	SALES	CHICAGO

66. List the Emps of Grade 3,4 belongs to the dept ACCOUNTING and RESEARCH?

A. SELECT * FROM EMP E WHERE E.DEPTNO IN (SELECT D.DEPTNO FROM DEPT D WHERE D.DNAME IN ('ACCOUNTING','RESEARCH'))
AND E.EMPNO IN (SELECT E.EMPNO FROM EMP E ,SALGRADE S WHERE E.SAL BETWEEN S.LOSAL AND S.HISAL AND S.GRADE IN (3,4)) ;

```
SELECT * FROM EMP E WHERE E.DEPTNO IN (SELECT D.DEPTNO FROM
DEPT D WHERE D.DNAME IN ('ACCOUNTING','RESEARCH') )
AND E.EMPNO IN (SELECT E.EMPNO FROM EMP E ,SALGRADE S WHERE E.SAL
BETWEEN S.LOSAL AND S.HISAL AND S.GRADE IN (3,4) ) ;
```

QUERY

Script Output | Query Result | Query Result 1 | Query Result 2 | SQL | All Rows Fetched: 4 in 0.074 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
2	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
3	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
4	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20

RESULT

67. whose Sal is more than ALLEN and exp more than SMITH in the asc order of EXP.

A. SELECT*FROM EMP WHERE SAL>(SELECT SAL FROM EMP WHERE ENAME='ALLEN') AND HIREDATE>(SELECT HIREDATE FROM EMP WHERE ENAME='SMITH') ORDER BY HIREDATE;

```
203
204 SELECT*FROM EMP WHERE SAL>(SELECT SAL FROM EMP WHERE ENAME='ALLEN')
205 AND HIREDATE>(SELECT HIREDATE FROM EMP WHERE ENAME='SMITH')
206 ORDER BY HIREDATE;
```

Script Output x | Query Result x

SQL | All Rows Fetched: 6 in 0.01 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
2	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
3	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
4	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10
5	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
6	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20

68. List the emps whose jobs same as SMITH or ALLEN.

A. SELECT*FROM EMP WHERE JOB IN (SELECT JOB FROM EMP WHERE ENAME IN ('SMITH','ALLEN'));

```
SELECT*FROM EMP WHERE
JOB IN (SELECT JOB FROM EMP WHERE ENAME IN ('SMITH','ALLEN'));
```

Script Output | Query Result

SQL | All Rows Fetched: 8 in 0.013 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
2	7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20
3	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30
4	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10
5	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
6	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
7	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
8	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30

69. Write a Query to display the details of emps whose Sal is same as of

A. SELECT*FROM EMP WHERE SAL IN (SELECT SAL FROM EMP E WHERE EMP.EMSSPNO<>E.EMPNO);

```
SELECT*FROM EMP WHERE SAL IN
(SELECT SAL FROM EMP E WHERE EMP.EMPNO<>E.EMPNO);
```

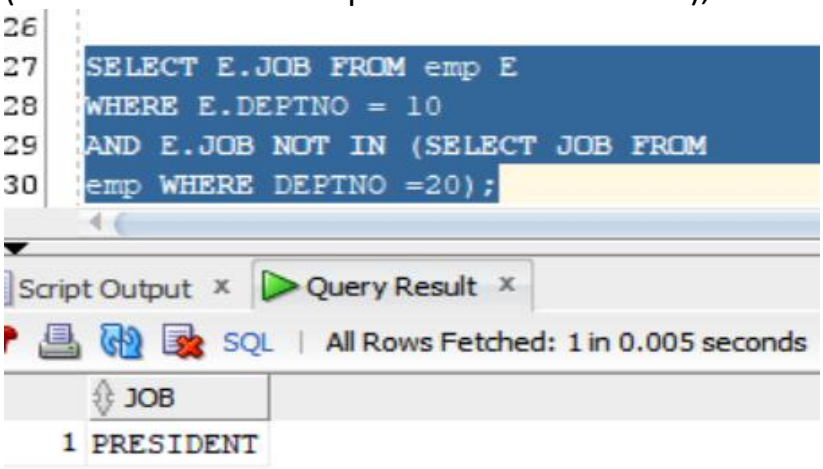
Script Output | Query Result

SQL | All Rows Fetched: 4 in 0.014 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
2	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
3	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
4	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30

70. Any jobs of deptno 10 those that are not found in deptno 20.

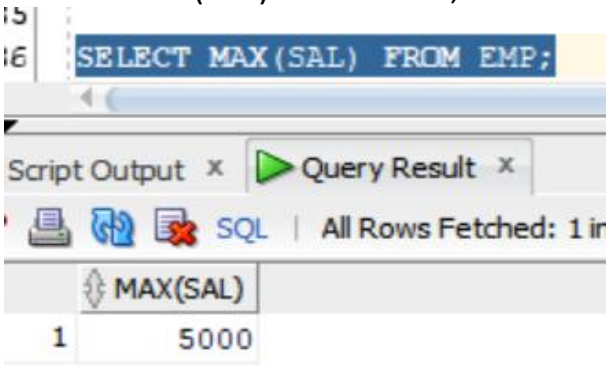
A. SELECT E.JOB FROM emp E WHERE E.DEPTNO = 10 AND E.JOB NOT IN (SELECT JOB FROM emp WHERE DEPTNO =20);



71. List of emps of emp1 who are not found in emp2.

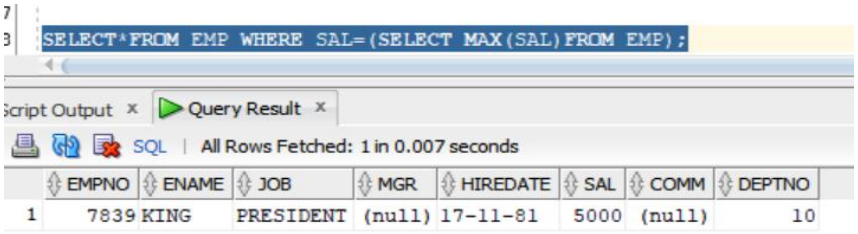
72. Find the highest sal of EMP table.

A. SELECT MAX(SAL) FROM EMP;



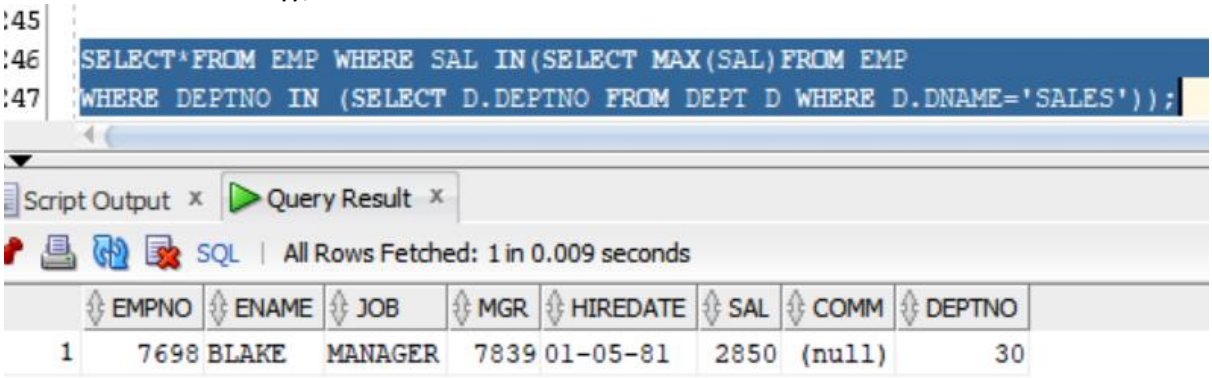
73. Find details of highest paid employee

A. SELECT*FROM EMP WHERE SAL=(SELECT MAX(SAL)FROM EMP);



74. Find the highest paid employee of sales department.

A. SELECT*FROM EMP WHERE SAL IN(SELECT MAX(SAL)FROM EMP WHERE DEPTNO IN (SELECT D.DEPTNO FROM DEPT D WHERE D.DNAME='SALES'));



75. List the most recently hired emp of grade3 belongs to location CHICAGO.

A. SELECT * FROM EMP E WHERE E.DEPTNO IN (SELECT D.DEPTNO FROM DEPT D WHERE D.LOC = 'CHICAGO') AND E.HIREDATE IN (SELECT MAX(HIREDATE) FROM EMP WHERE EMPNO IN (SELECT EMPNO FROM EMP E,SALGRADE S WHERE E.SAL BETWEEN S.LOSAL AND S.HISAL AND S.GRADE = 3)) ;

```
50
51  SELECT * FROM EMP E WHERE E.DEPTNO IN ( SELECT D.DEPTNO FROM DEPT D WHERE
52  D.LOC = 'CHICAGO') AND
53   E.HIREDATE IN (SELECT MAX(HIREDATE) FROM EMP WHERE EMPNO IN (SELECT EMPNO
54  FROM EMP E,SALGRADE S
55  WHERE E.SAL BETWEEN S.LOSAL AND S.HISAL AND S.GRADE = 3)) ;
```

Script Output | Query Result

SQL | All Rows Fetched: 1 in 0.002 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30

76. List the employees who are senior to most recently hired employee working under king

A. SELECT * FROM EMP WHERE HIREDATE < (SELECT MAX(HIREDATE) FROM EMP WHERE MGR IN (SELECT EMPNO FROM EMP WHERE ENAME = 'KING')) ;

```
56
57  SELECT * FROM EMP WHERE HIREDATE < (SELECT MAX(HIREDATE) FROM EMP WHERE MGR
58  IN (SELECT EMPNO FROM EMP WHERE ENAME = 'KING')) ;
```

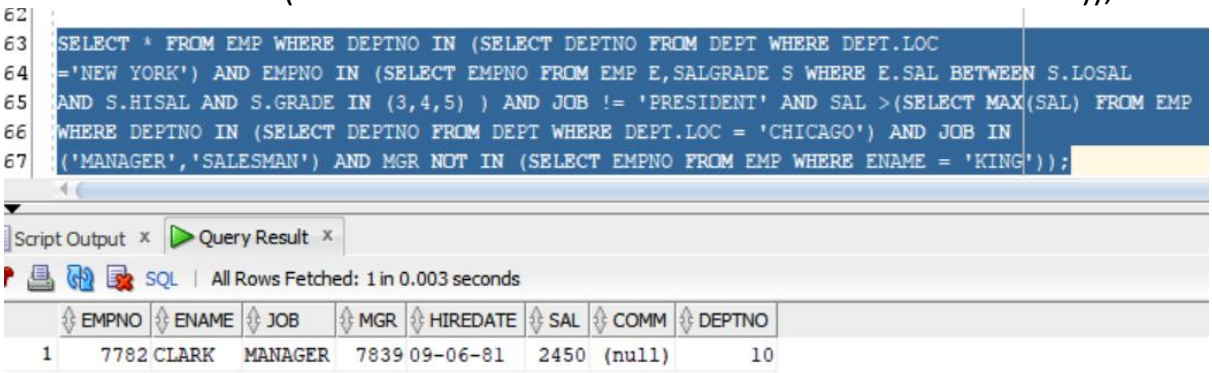
Script Output | Query Result

SQL | All Rows Fetched: 5 in 0.012 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
2	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
3	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
4	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
5	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30

77. List the details of the employee belong to New York with grade 3 to 5 except 'PRESIDENT' whose sal> the highest paid employee of Chicago in a groupwhere there is manager and salesman not working under king

A. SELECT * FROM EMP WHERE DEPTNO IN (SELECT DEPTNO FROM DEPT WHERE DEPT.LOC ='NEW YORK') AND EMPNO IN (SELECT EMPNO FROM EMP E,SALGRADE S WHERE E.SAL BETWEEN S.LOSAL AND S.HISAL AND S.GRADE IN (3,4,5)) AND JOB != 'PRESIDENT' AND SAL >(SELECT MAX(SAL) FROM EMP WHERE DEPTNO IN (SELECT DEPTNO FROM DEPT WHERE DEPT.LOC = 'CHICAGO') AND JOB IN ('MANAGER','SALESMAN') AND MGR NOT IN (SELECT EMPNO FROM EMP WHERE ENAME = 'KING'));



```
62
63  SELECT * FROM EMP WHERE DEPTNO IN (SELECT DEPTNO FROM DEPT WHERE DEPT.LOC
64  ='NEW YORK') AND EMPNO IN (SELECT EMPNO FROM EMP E,SALGRADE S WHERE E.SAL BETWEEN S.LOSAL
65  AND S.HISAL AND S.GRADE IN (3,4,5) ) AND JOB != 'PRESIDENT' AND SAL >(SELECT MAX(SAL) FROM EMP
66  WHERE DEPTNO IN (SELECT DEPTNO FROM DEPT WHERE DEPT.LOC = 'CHICAGO') AND JOB IN
67  ('MANAGER','SALESMAN') AND MGR NOT IN (SELECT EMPNO FROM EMP WHERE ENAME = 'KING'));
```

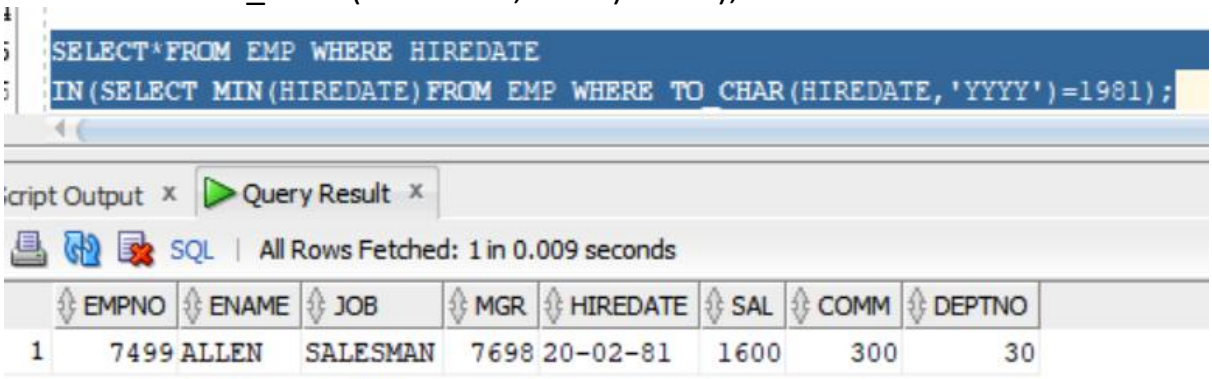
Script Output | Query Result

SQL | All Rows Fetched: 1 in 0.003 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10

78. List the details of the senior employee belong to 1981.

A. SELECT*FROM EMP WHERE HIREDATE IN(SELECT MIN(HIREDATE)FROM EMP WHERE TO_CHAR(HIREDATE,'YYYY')=1981);



```
SELECT*FROM EMP WHERE HIREDATE
IN(SELECT MIN(HIREDATE)FROM EMP WHERE TO_CHAR(HIREDATE,'YYYY')=1981);
```

Script Output | Query Result

SQL | All Rows Fetched: 1 in 0.009 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30

79. List the employees who joined in 1981 with the job same as the most seniorperson of the year 1981.

A. SELECT*FROM EMP WHERE HIREDATE IN (SELECT HIREDATE FROM EMP WHERE JOB IN(SELECT JOB FROM EMP WHERE HIREDATE IN(SELECT MIN(HIREDATE)FROM EMP WHERE TO_CHAR(HIREDATE,'YYYY')=1981)));

```
SELECT*FROM EMP WHERE
HIREDATE IN (SELECT HIREDATE FROM EMP WHERE
JOB IN(SELECT JOB FROM EMP WHERE
HIREDATE IN(SELECT MIN(HIREDATE)FROM EMP WHERE
TO_CHAR(HIREDATE,'YYYY')=1981)));
```

Script Output | Query Result

SQL | All Rows Fetched: 4 in 0.022 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
2	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
3	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
4	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30

80. List the most senior empl working under the king and grade is more than 3

A. SELECT*FROM EMP WHERE MGR IN(SELECT EMPNO FROM EMP WHERE ENAME='KING') AND EMPNO IN(SELECT EMPNO FROM EMP E,SALGRADE S WHERE E.SAL BETWEEN S.LOSAL AND S.HISAL AND S.GRADE>3);

```
SELECT*FROM EMP WHERE
MGR IN(SELECT EMPNO FROM EMP WHERE ENAME='KING')
AND EMPNO IN(SELECT EMPNO FROM EMP E,SALGRADE S WHERE E.SAL BETWEEN S.LOSAL AND S.HISAL AND S.GRADE>3);
```

cript Output | Query Result

SQL | All Rows Fetched: 3 in 0.041 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
2	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
3	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20

81.Find the total sal given to the MGR?

```
select sum(sal) from emp where empno in
(select distinct e.mgr from emp e,emp m where e.mgr=m.empno);
```

y Result x | Query Result 1 x | Query Result 2 x | Query Result 3 x | Script Output

SQL | All Rows Fetched: 1 in 0.031 seconds

SUM(SAL)
19275

82. Find the total annual sal to distribute job wise in the year 81.

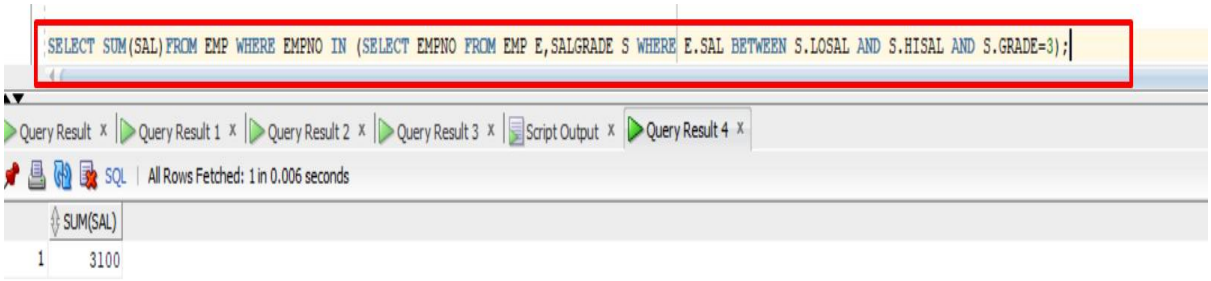
```
SELECT*FROM EMP;
SELECT JOB,SUM(12*SAL)FROM EMP WHERE TO_CHAR(HIREDATE,'YYYY')='1981' GROUP BY JOB;
```

Query Result x | Query Result 1 x | Query Result 2 x | Query Result 3 x | Script Output x | Query Result 4 x

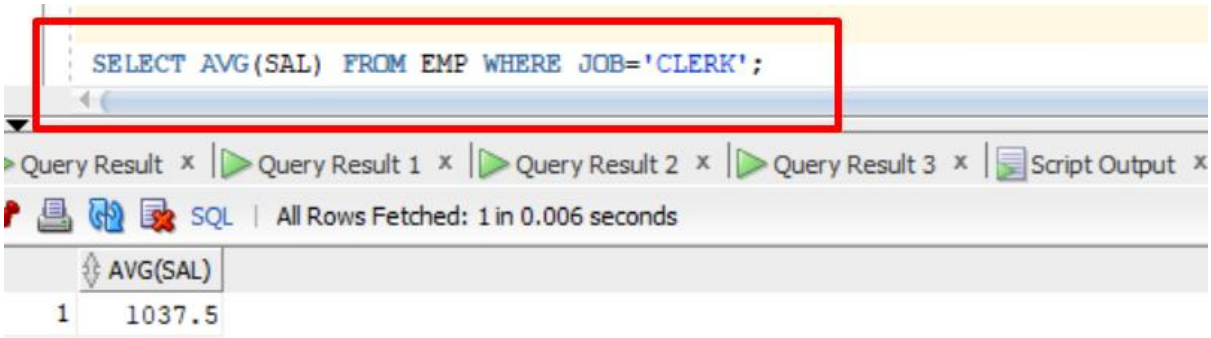
SQL | All Rows Fetched: 5 in 0.004 seconds

	JOB	SUM(12*SAL)
1	PRESIDENT	60000
2	MANAGER	99300
3	ANALYST	36000
4	SALESMAN	67200
5	CLERK	11400

83. Display total sal employee belonging to grade 3.



84.Display the average salaries of all the clerks.



85.List the employeein dept 20 whose sal is >the average sal 0f dept 10 emps.

```
select * from emp where deptno =20 and sal >(select avg (sal) from emp
where deptno = 10);
```

Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Script Output | Query Result 4

SQL | All Rows Fetched: 3 in 0.002 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
2	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
3	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20

86.Display the number of employees for each job group deptno wise.

```
select deptno ,job ,count(*) from emp group by deptno,job;
```

Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Script Output | Qu

SQL | All Rows Fetched: 9 in 0.017 seconds

	DEPTNO	JOB	COUNT(*)
1	10	PRESIDENT	1
2	30	MANAGER	1
3	10	MANAGER	1
4	20	MANAGER	1
5	20	ANALYST	2
6	20	CLERK	2
7	30	SALESMAN	4
8	30	CLERK	1
9	10	CLERK	1

87.List the manage rno and the number of employees working for those mgrs in theascending Mgrno.

```
SELECT E.MGR,COUNT(*)FROM EMP E,EMP E_1 WHERE E.MGR=E_1.EMPNO GROUP BY E.MGR ORDER BY E.MGR ASC;
```

Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Script Output | Query Result 4

SQL | All Rows Fetched: 14 in 0.015 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESI...	(n...	17-11-81	5000	(null)	10
2	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
3	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
4	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
5	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
6	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
7	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
8	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
9	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
10	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30

88.List the department,details where at least two emps are working

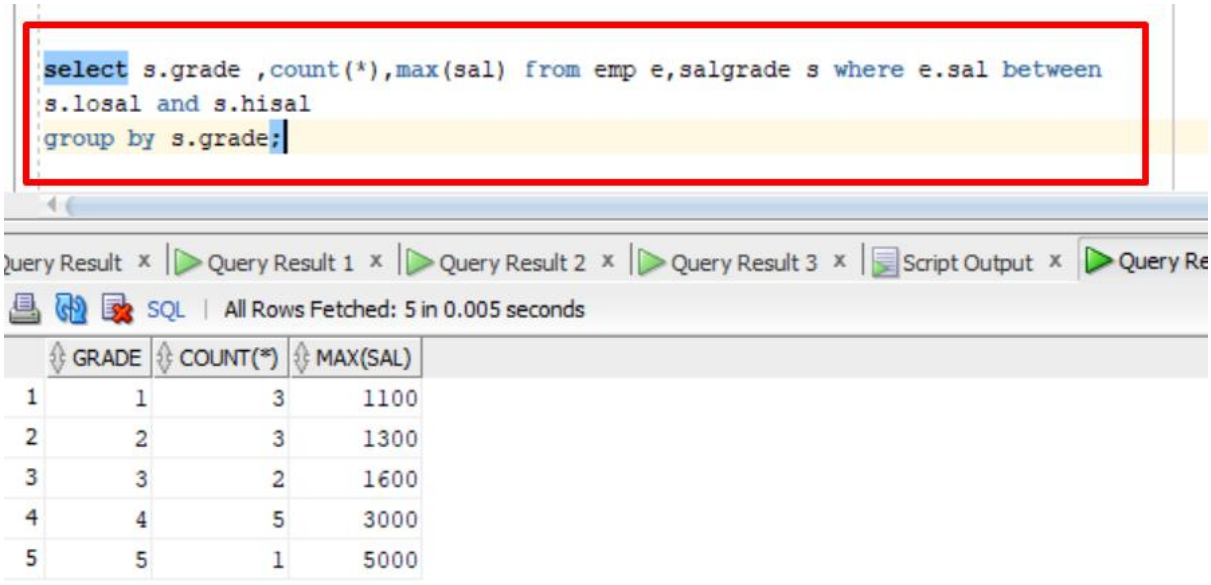
```
SELECT DEPTNO,COUNT (*)FROM EMP GROUP BY DEPTNO HAVING COUNT(*)>=2;
```

Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Script Output | Query Re

SQL | All Rows Fetched: 3 in 0.004 seconds

	DEPTNO	COUNT(*)
1	10	3
2	30	6
3	20	5

89.Display the Grade, Number of emps, and max sal of each grade.



```
select s.grade ,count(*),max(sal) from emp e,salgrade s where e.sal between
s.losal and s.hisal
group by s.grade;
```

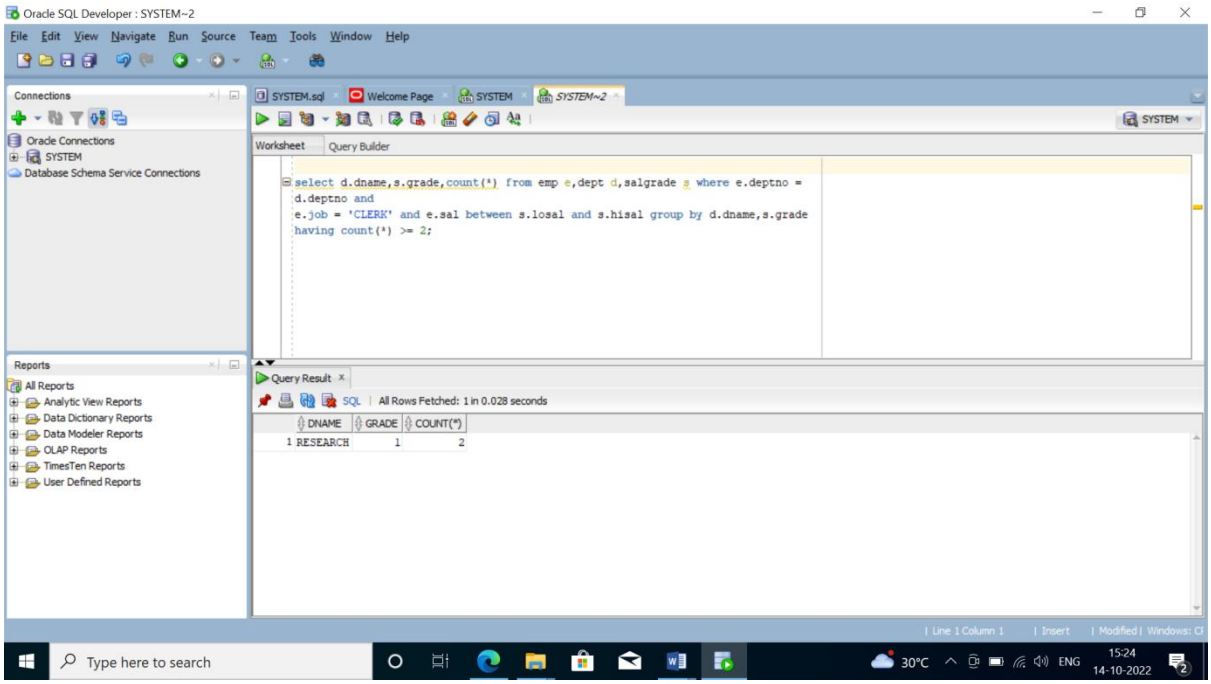
Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Script Output | Query Re

SQL | All Rows Fetched: 5 in 0.005 seconds

	GRADE	COUNT(*)	MAX(SAL)
1	1	3	1100
2	2	3	1300
3	3	2	1600
4	4	5	3000
5	5	1	5000

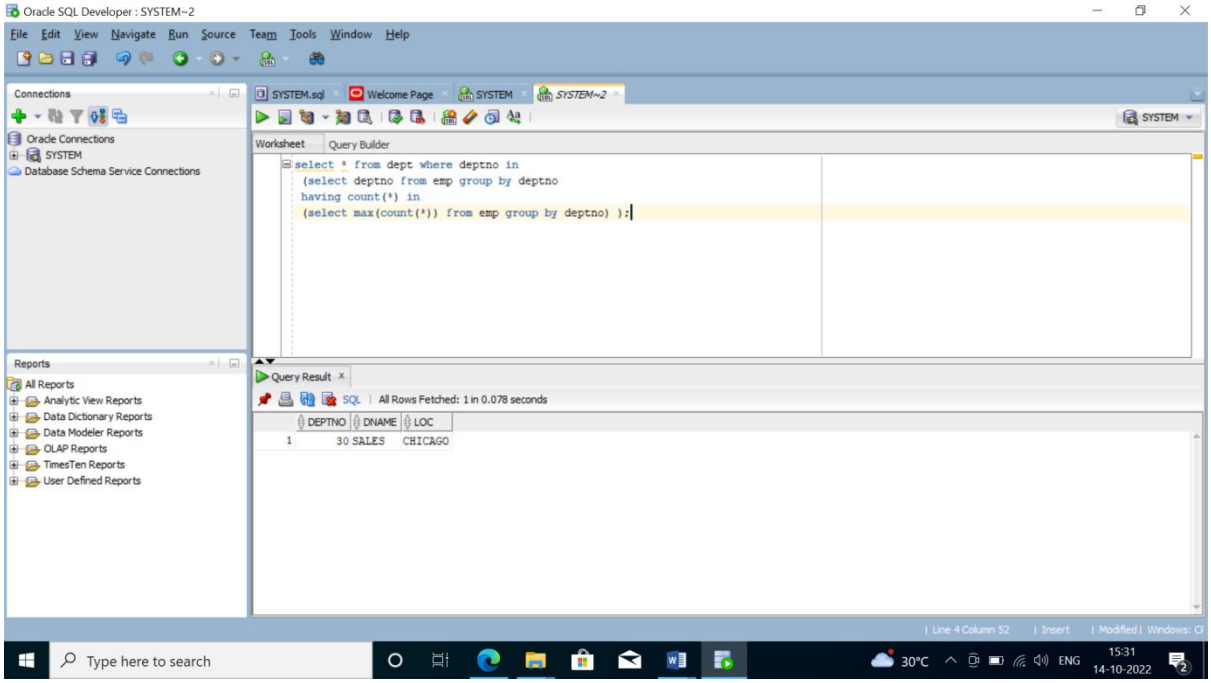
90. Display dname, grade, No. of emps where at least two emps are clerks.

A. select d.dname,s.grade,count(*) from emp e,dept d,salgrade s where e.deptno = d.deptno and e.job = 'CLERK' and e.sal between s.losal and s.hisal group by d.dname,s.grade having count(*) >= 2;



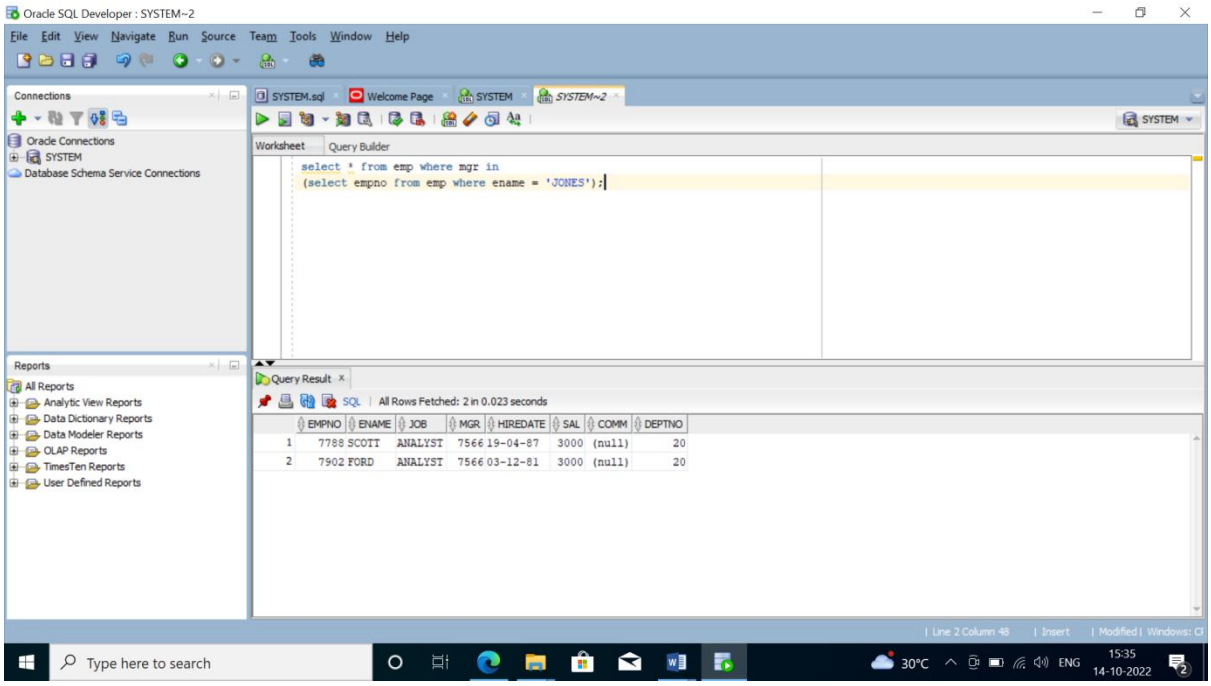
91. List the details of the department where maximum number of emps are working.

A. select * from dept where deptno in (select deptno from emp group by deptno having count(*) in (select max(count(*)) from emp group by deptno));



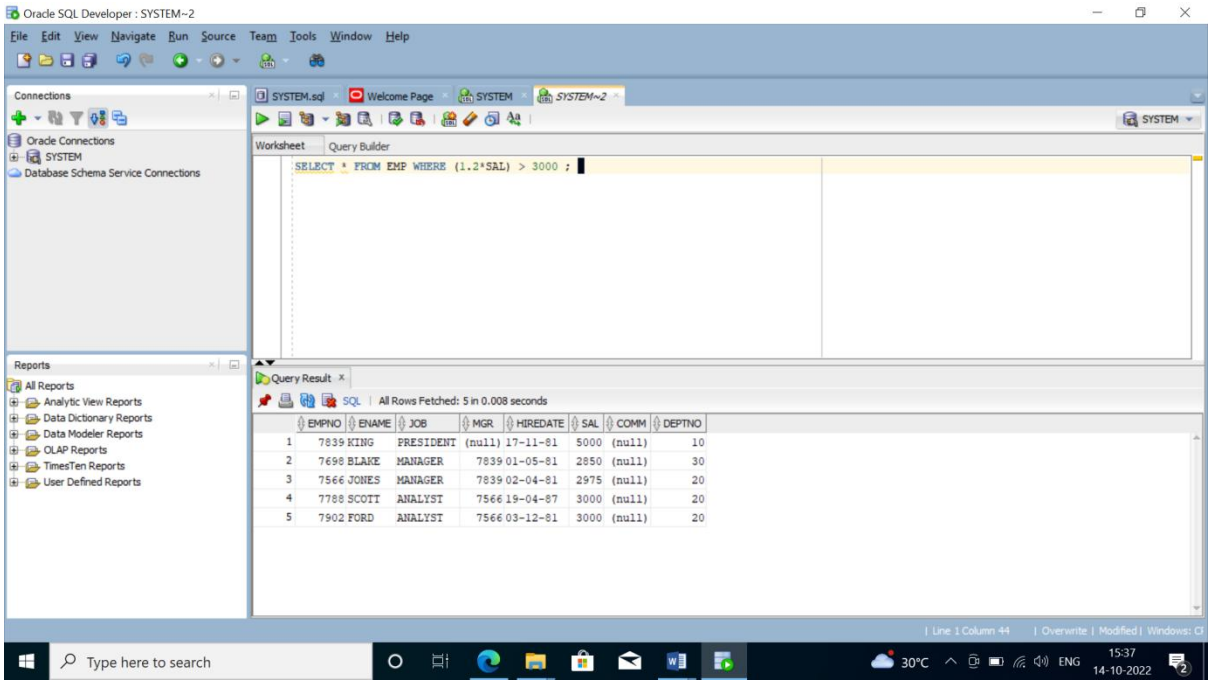
92. Display the emps whose manager name is JONES.

A. select * from emp where mgr in (select empno from emp where ename = ‘JONES’);



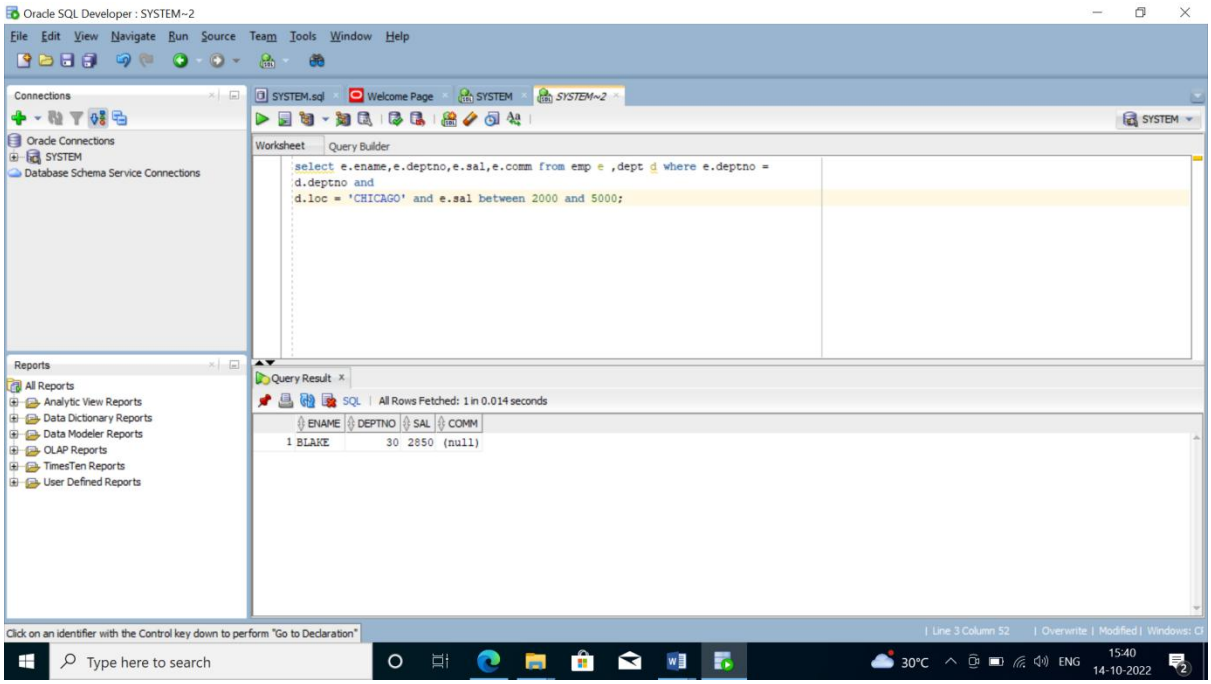
93. List the employees whose salary is more than 3000 after giving 20% increment.

A. SELECT * FROM EMP WHERE (1.2*SAL) > 3000 ;



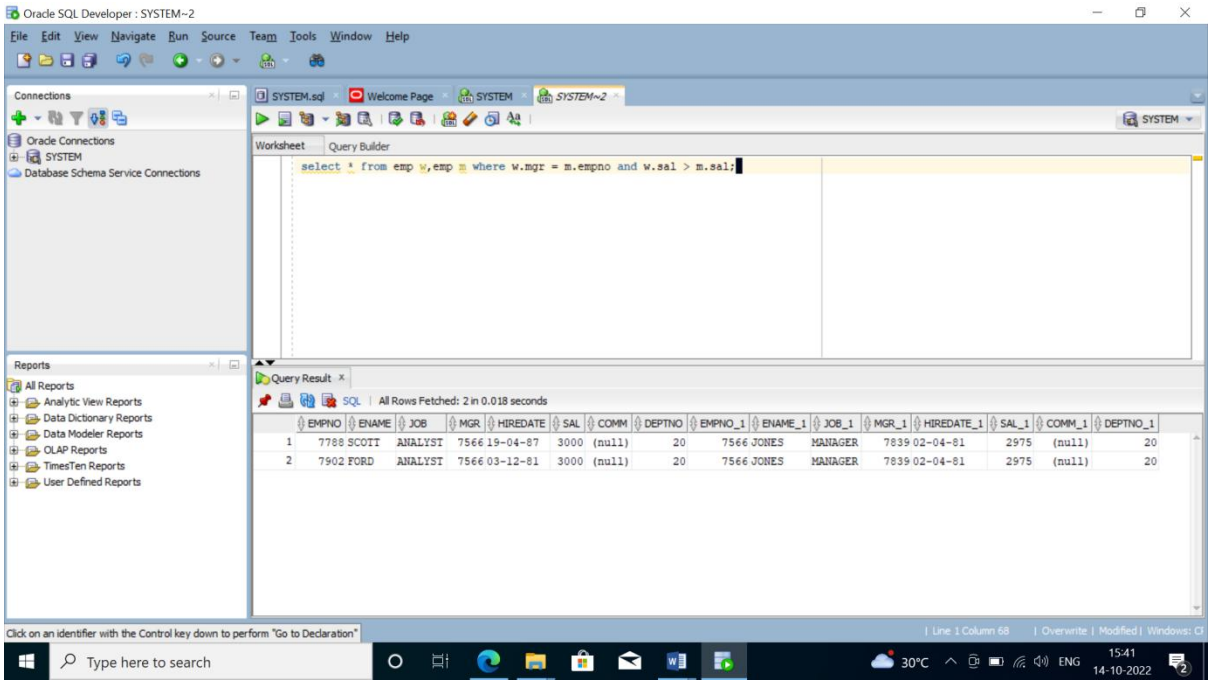
94. List the emps name, dept, sal and comm. For those whose salary is between 2000and 5000 while loc is Chicago.

A. select e.ename,e.deptno,e.sal,e.comm from emp e ,dept d where e.deptno = d.deptno and d.loc = 'CHICAGO' and e.sal between 2000 and 5000;



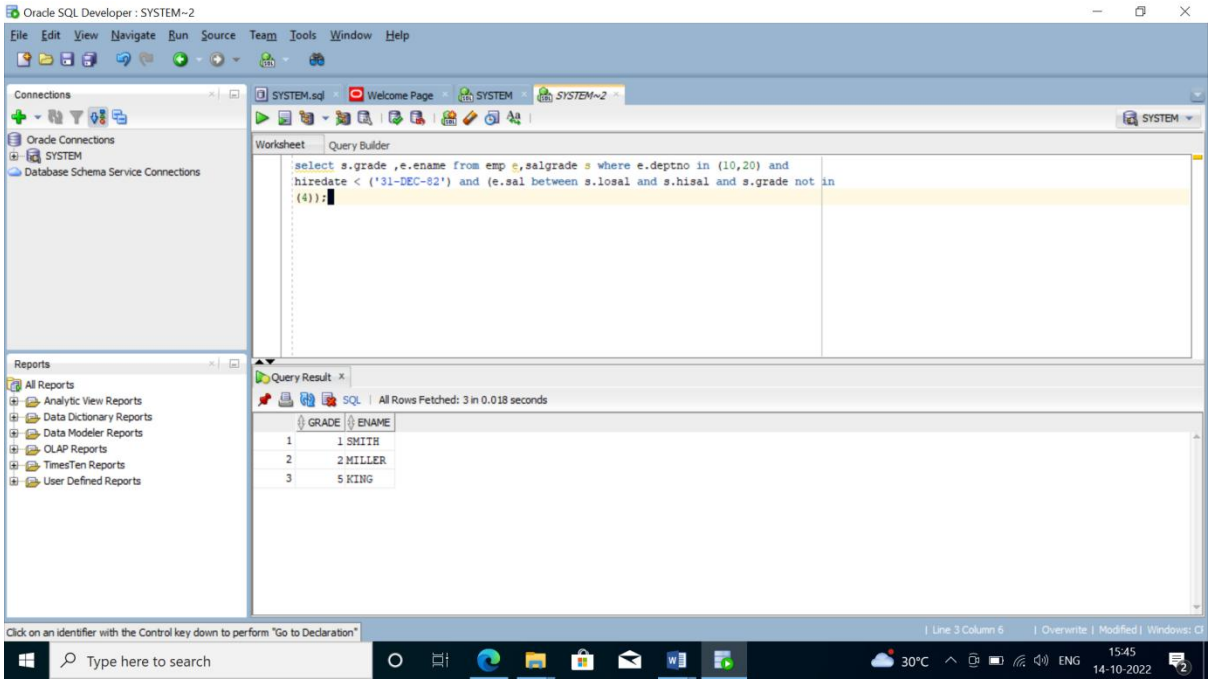
95. List the emps whose sal is greater than his managers salary?

A. select * from emp w,emp m where w.mgr = m.empno and w.sal > m.sal;



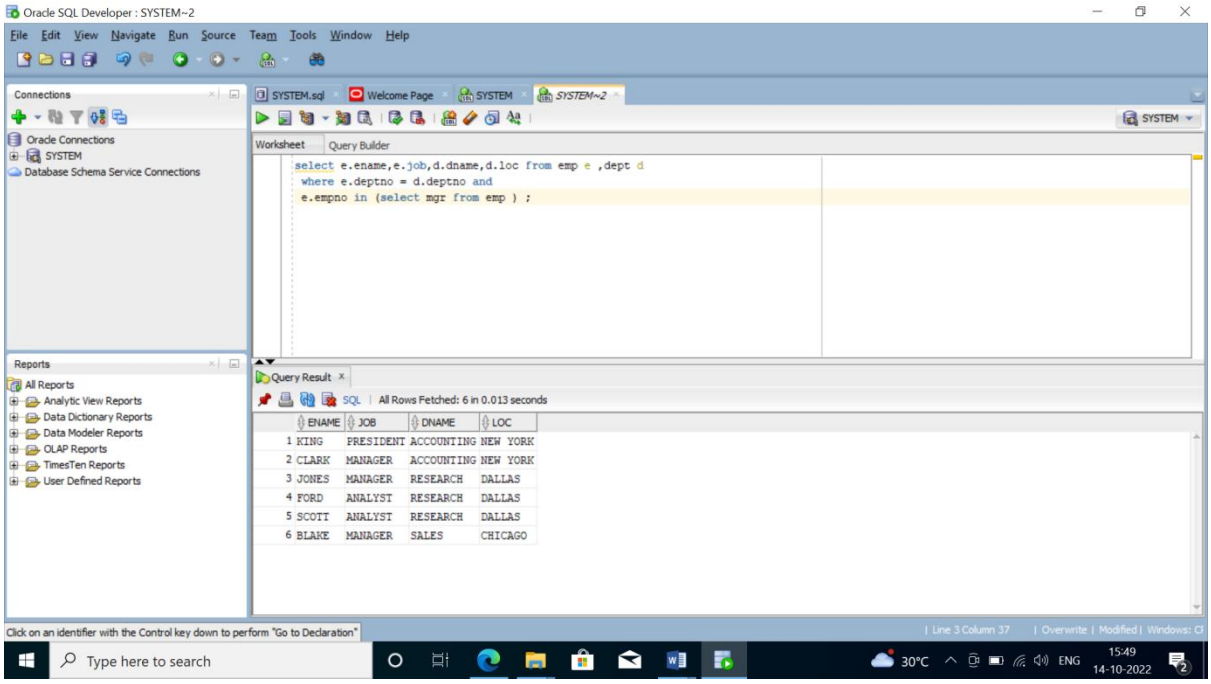
96. List the grade, EMP name for the deptno 10 or deptno 30 but sal grade is not 4while they joined the company before ’31-dec-82’?

A. select s.grade ,e.ename from emp e,salgrade s where e.deptno in (10,20) and hiredate < ('31-DEC-82') and (e.sal between s.losal and s.hisal and s.grade not in (4));



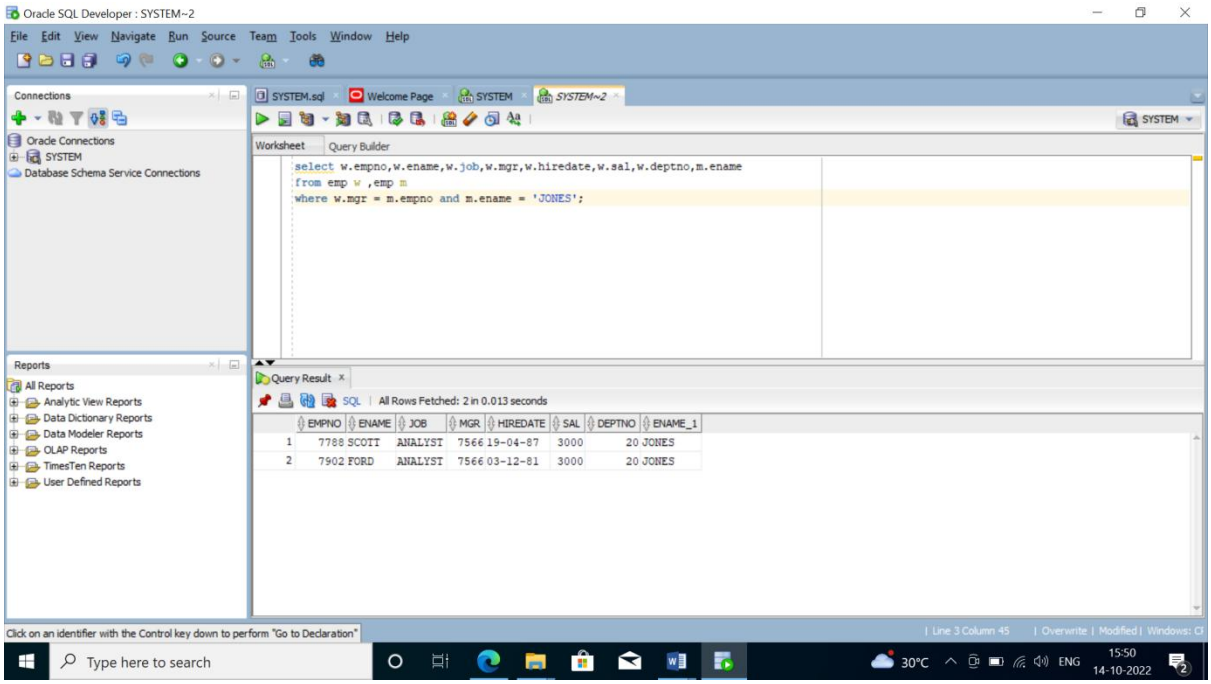
97. List the name, job, dname, location for those who are working as MGRS.

ANS)select e.ename,e.job,d.dname,d.loc from emp e ,dept d where e.deptno = d.deptno and e.empno in (select mgr from emp) ;



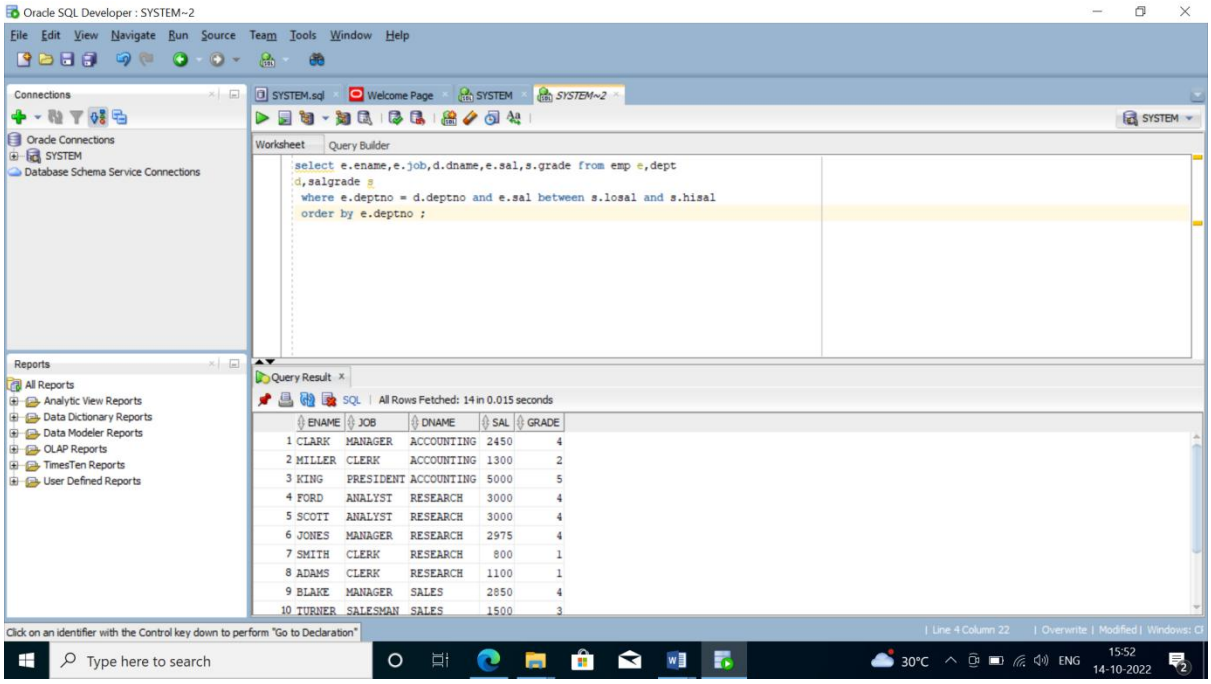
98.List the emps whose mgr name is jones and also list their manager's name?

S select w.empno,w.ename,w.job,w.mgr,w.hiredate,w.sal,w.deptno,m.ename from emp w ,emp m where w.mgr = m.empno and m.ename = 'JONES';



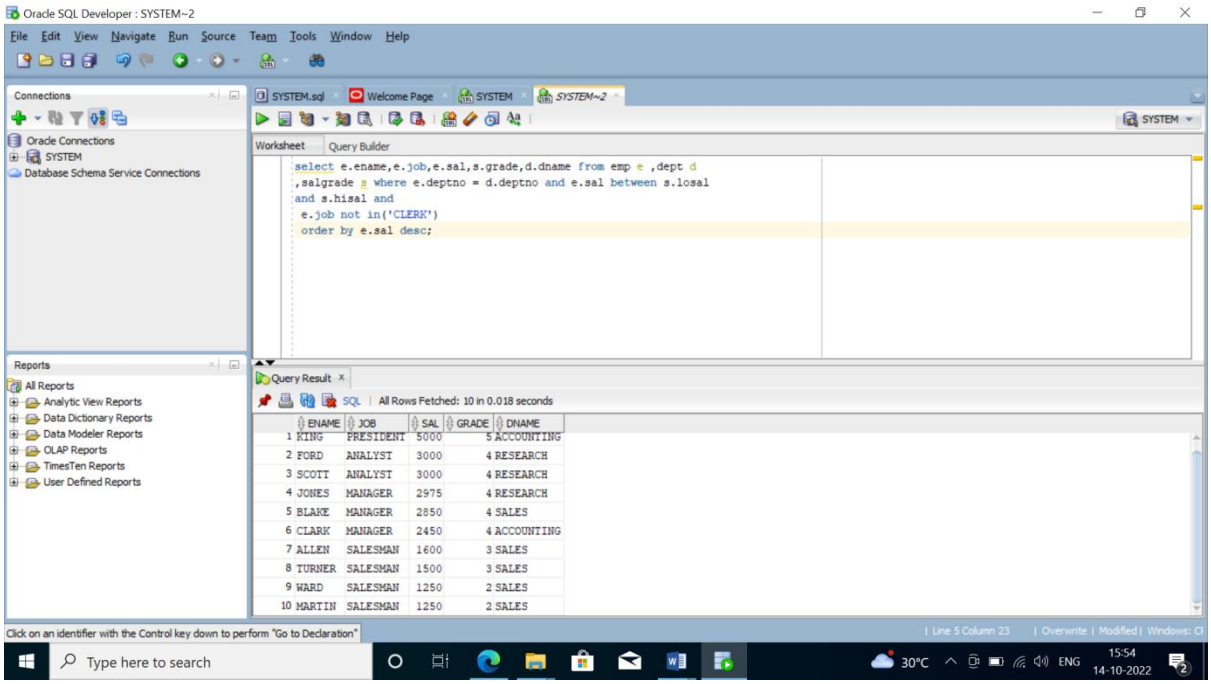
99.List the name, job, dname ,sal, grade dept wise

A. select e.ename,e.job,d.dname,e.sal,s.grade from emp e,dept d,salgrade s where e.deptno = d.deptno and e.sal between s.losal and s.hisal order by e.deptno ;

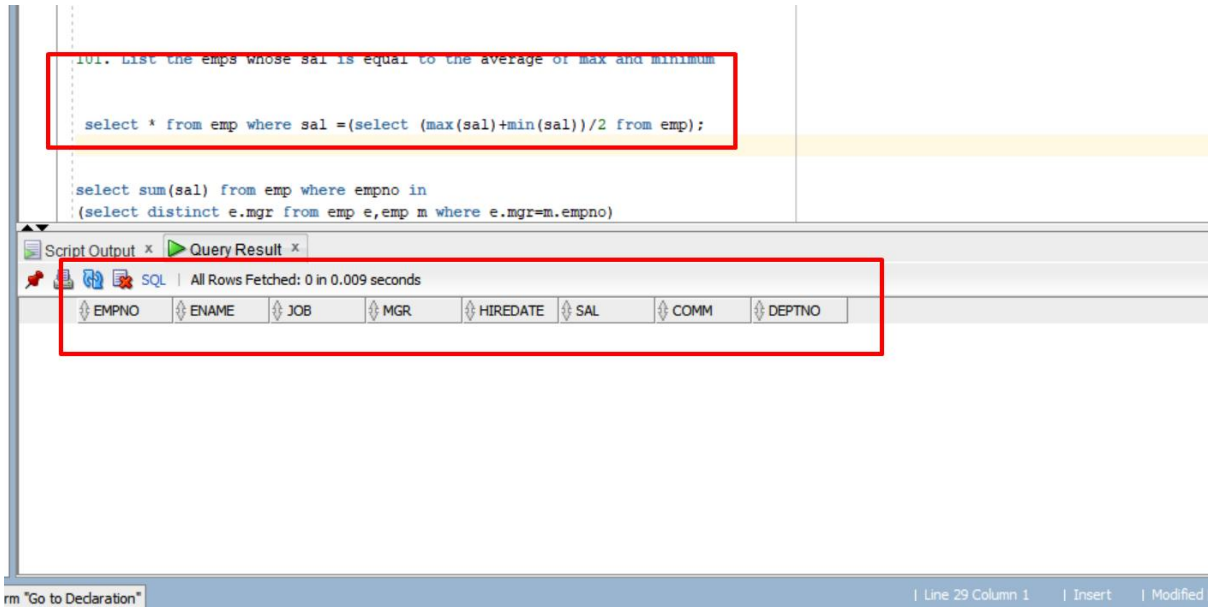


S100. List the emp name, job, sal, grade and dname except clerks and sort on the basisof highest sal.

A. select e.ename,e.job,e.sal,s.grade,d.dname from emp e ,dept d ,salgrade s where e.deptno = d.deptno and e.sal between s.losal and s.hisal and e.job not in('CLERK') order by e.sal desc;

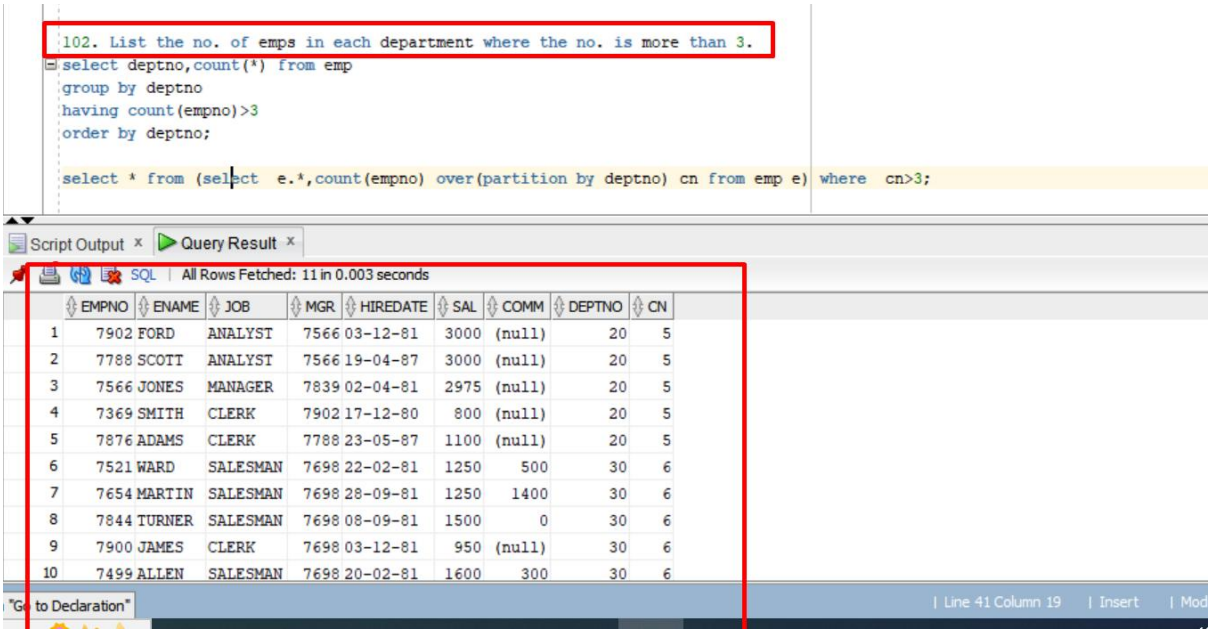


101. List the emps whose sal is equal to the average of max and minimum



102. List the no. of emps in each department where the no. is more than 3.

select * from (select e.*,count(empno) over(partition by deptno) cn from emp e) where cn>3;

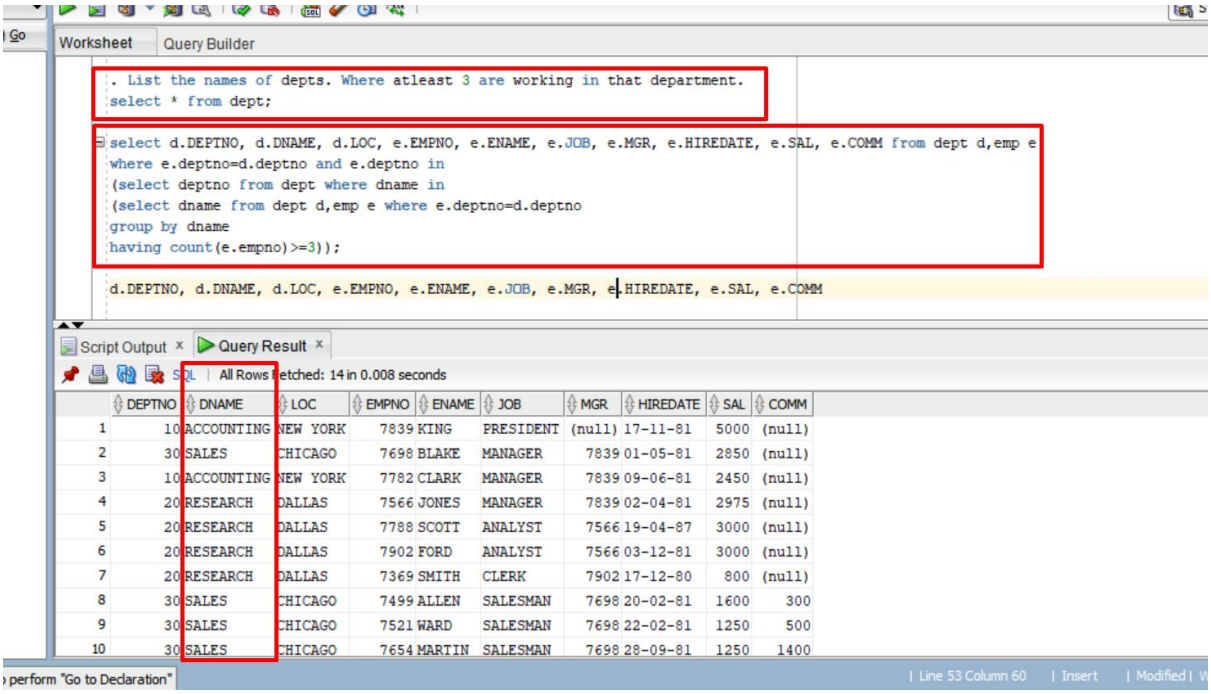


```
102. List the no. of emps in each department where the no. is more than 3.
select deptno,count(*) from emp
group by deptno
having count(empno)>3
order by deptno;

select * from (select e.*,count(empno) over(partition by deptno) cn from emp e) where cn>3;
```

Script Output | Query Result | All Rows Fetched: 11 in 0.003 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	CN
1	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20	5
2	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20	5
3	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20	5
4	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20	5
5	7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20	5
6	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30	6
7	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30	6
8	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30	6
9	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30	6
10	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30	6

103. List the names of depts. Where atleast 3 are working in that department.

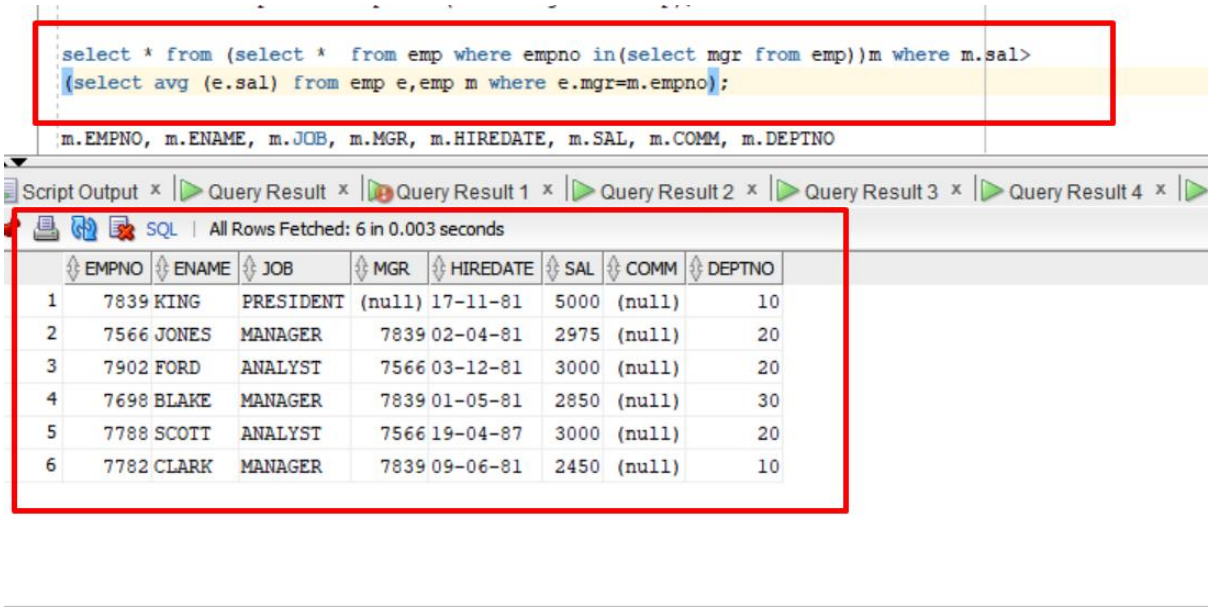


```
. List the names of depts. Where atleast 3 are working in that department.
select * from dept;

select d.DEPTNO, d.DNAME, d.LOC, e.EMPNO, e.ENAME, e.JOB, e.MGR, e.HIREDATE, e.SAL, e.COMM from dept d,emp e
where e.deptno=d.deptno and e.deptno in
(select deptno from dept where dname in
(select dname from dept d,emp e where e.deptno=d.deptno
group by dname
having count(e.empno)>=3));

d.DEPTNO, d.DNAME, d.LOC, e.EMPNO, e.ENAME, e.JOB, e.MGR, e.HIREDATE, e.SAL, e.COMM
```

Script Output | Query Result | All Rows Fetched: 14 in 0.008 seconds

	DEPTNO	DNAME	LOC	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM
1	10	ACCOUNTING	NEW YORK	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)
2	30	SALES	CHICAGO	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)
3	10	ACCOUNTING	NEW YORK	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)
4	20	RESEARCH	DALLAS	7566	JONES	MANAGER	7839	02-04-81	2975	(null)
5	20	RESEARCH	DALLAS	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)
6	20	RESEARCH	DALLAS	7902	FORD	ANALYST	7566	03-12-81	3000	(null)
7	20	RESEARCH	DALLAS	7369	SMITH	CLERK	7902	17-12-80	800	(null)
8	30	SALES	CHICAGO	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300
9	30	SALES	CHICAGO	7521	WARD	SALESMAN	7698	22-02-81	1250	500
10	30	SALES	CHICAGO	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400

104. List the managers whose sal is more than his employess avg salary.



```
select * from (select *  from emp where empno in(select mgr from emp))m where m.sal>
(select avg (e.sal) from emp e,emp m where e.mgr=m.empno);
```

```
m.EMPNO, m.ENAME, m.JOB, m.MGR, m.HIREDATE, m.SAL, m.COMM, m.DEPTNO
```

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4

SQL | All Rows Fetched: 6 in 0.003 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10
2	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
3	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
4	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
5	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
6	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10

105. List the name,salary,comm. For those employees whose net pay is greater than or equal to any other employee salary of the company

```
select  ename ,sal,comm from emp where sal+nvl(comm,0)>=sal;
```

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4 | Query Result 5

SQL | All Rows Fetched: 14 in 0.003 seconds

	ENAME	SAL	COMM
1	KING	5000	(null)
2	BLAKE	2850	(null)
3	CLARK	2450	(null)
4	JONES	2975	(null)
5	SCOTT	3000	(null)
6	FORD	3000	(null)
7	SMITH	800	(null)
8	ALLEN	1600	300
9	WARD	1250	500
10	MARTIN	1250	1400

own to perform "Go to Declaration" | Line 90 Column 61 | Ins

106. List the emp whose sal<his manager but more than any other manager.

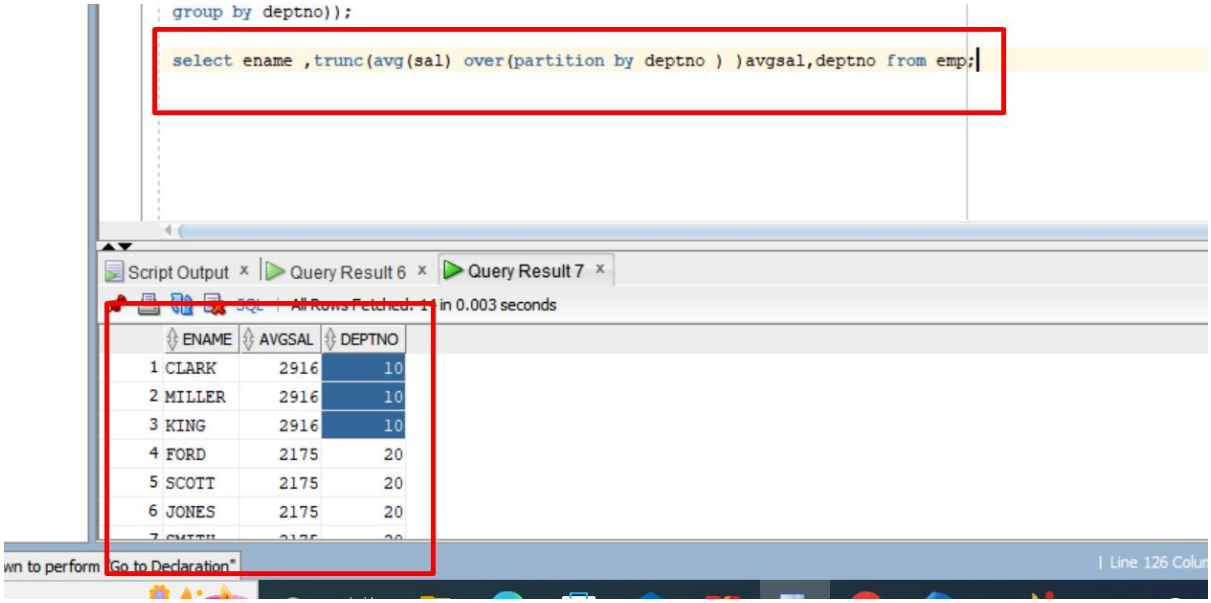
```
select e.sal,e.ename,m.ename,m.sal from emp e,emp m where e.mgr=m.empno
and e.sal<m.sal
;
List the emp whose sal<his manager but more than any other manager.


SELECT * FROM
(SELECT E.ENAME EMNAME,E.SAL EMSAL,M.ENAME MGNAME,M.SAL MGSAL FROM EMP E,EMP M
WHERE E.MGR=M.EMPNO AND E.SAL<M.SAL) WHERE
EMSAL IN
(SELECT SAL FROM EMP WHERE EMPNO IN (SELECT  MGR FROM EMP));
```

Script Output | Query Result | Query Result 1 | Query Result 2 | Query Result 3 | Query Result 4 | Query Result 5 | Que

SQL | All Rows Fetched: 3 in 0.005 seconds

	EMNAME	EMSAL	MGNAME	MGSAL
1	BLAKE	2850	KING	5000
2	CLARK	2450	KING	5000
3	JONES	2975	KING	5000

107. List the employee names and his average salary department wise.



108. Find out least 5 earners of the company.

```
select * from emp;

Select * from emp e where 5> (select count(*) from emp where
e.sal >sal);
```

Script Output | Query Result 6 | Query Result 7

SQL | All Rows Fetched: 5 in 0.017 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
2	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
3	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
4	7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20
5	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30

109. List the Name, Salary, Comm and Net Pay is more than any other employee.

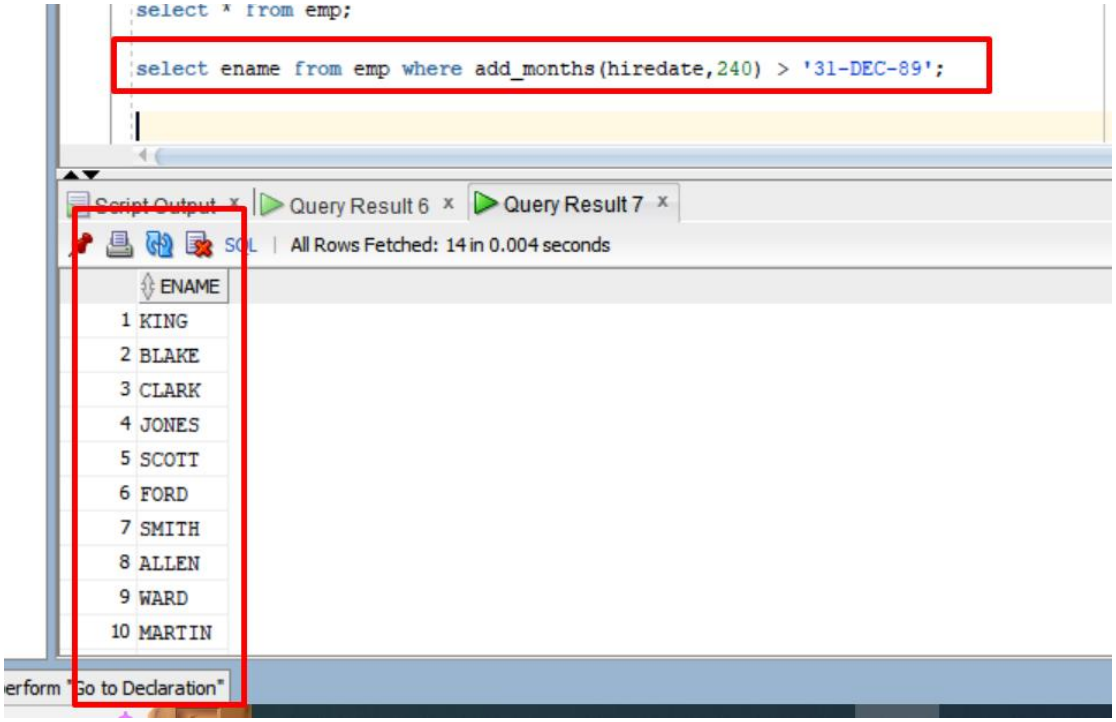
```
Select e.ename,e.sal,e.comm,nvl2(comm,sal+comm,sal)
NETPAY
 from emp e
 where nvl2(comm,sal+comm,sal) > any (select sal from emp
where empno =e.empno) ;
```

Script Output | Query Result 6 | Query Result 7

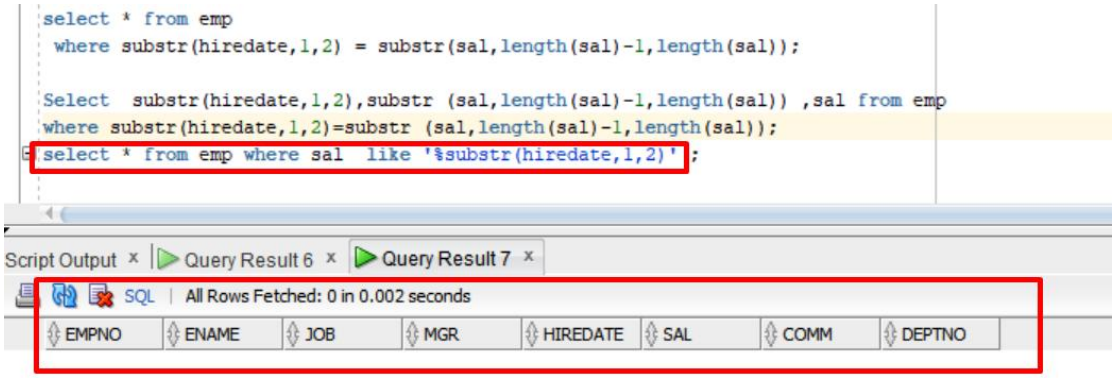
SQL | All Rows Fetched: 3 in 0.003 seconds

	ENAME	SAL	COMM	NETPAY
1	ALLEN	1600	300	1900
2	WARD	1250	500	1750
3	MARTIN	1250	1400	2650

110.List the Enames who are retiring after 31-Dec-89 the max Job period is 20Y.



111.List the emps whose first 2 chars from Hiredate=last 2 characters of Salary.



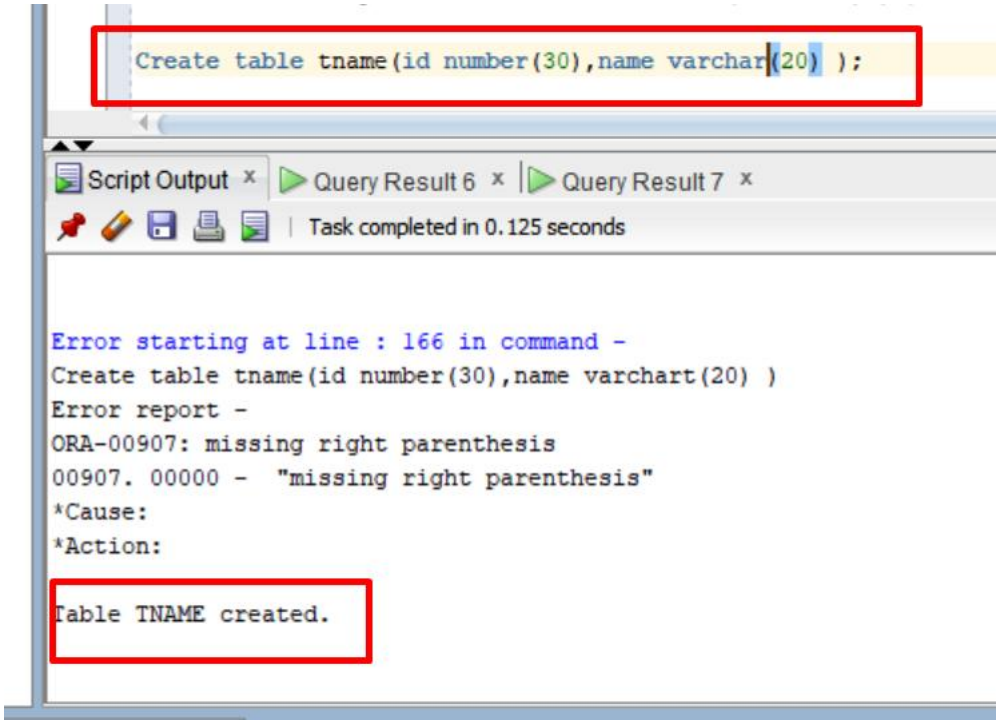
112.write a definition of how to create a table?

Create a table by using DDL command, a table contain column and row , a column contain their own data type .

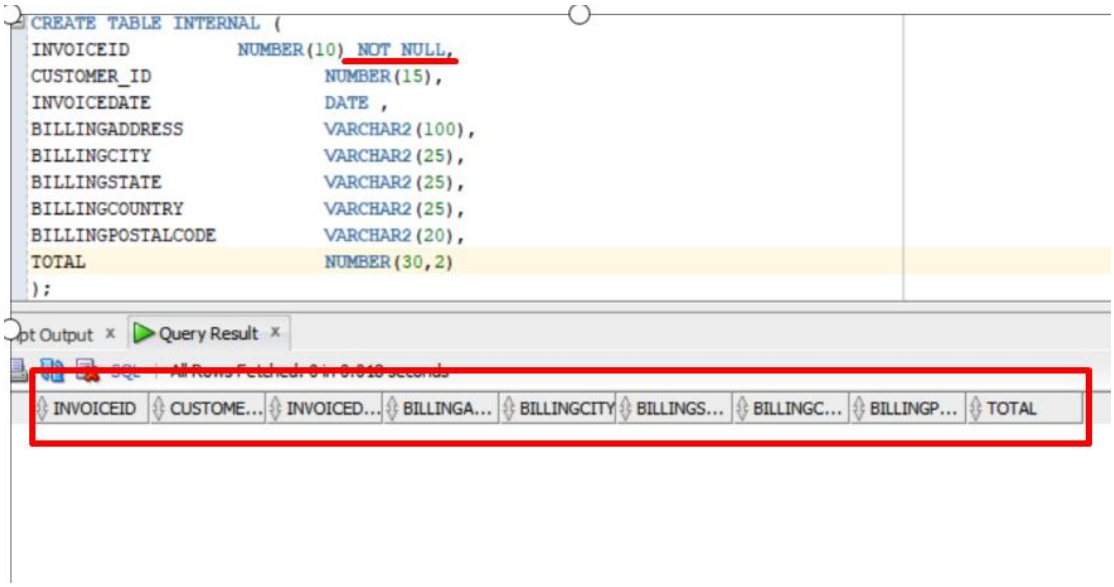
A table is database object.

Syntax

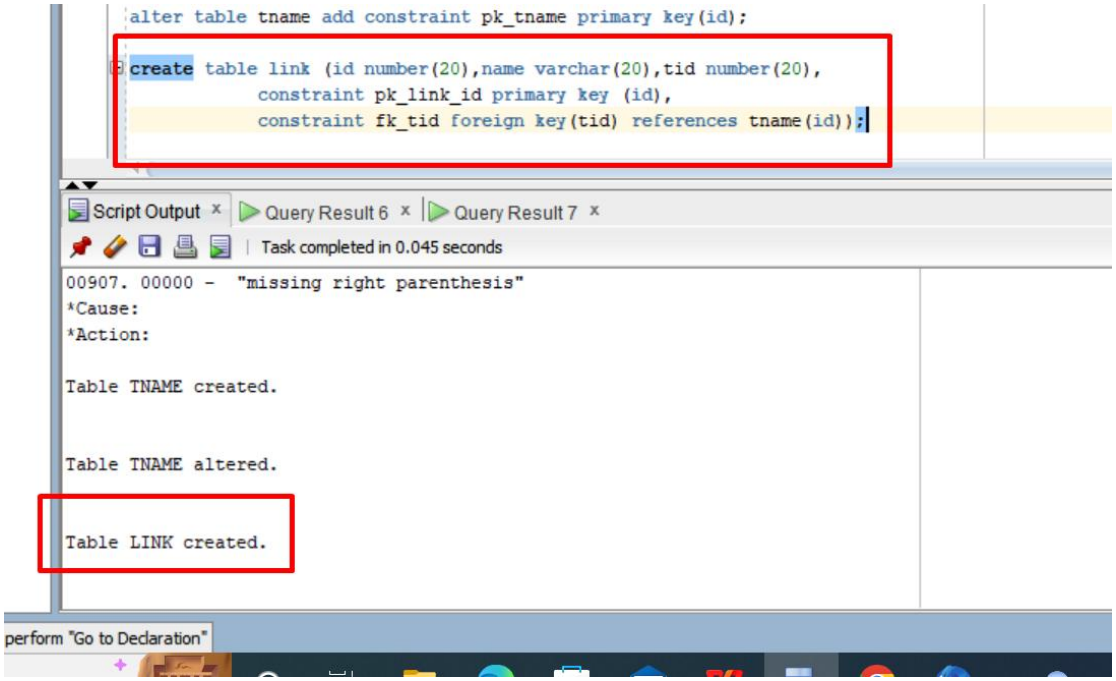
Create table tname(id number(30),name varchar(20));



113.Create the Table by using the not null condition.



114.Create the tables by using the primary key and foreign key?



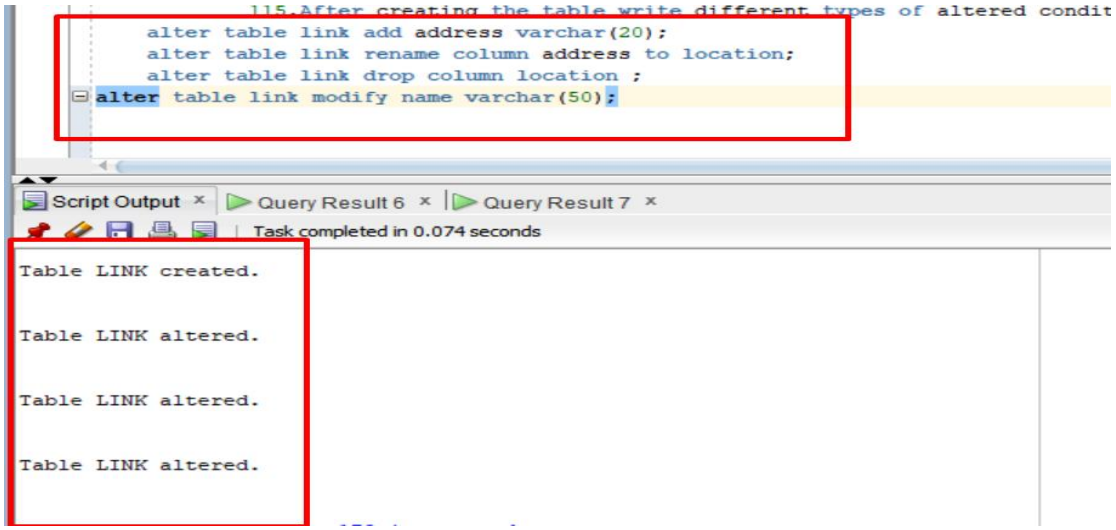
115.After creating the table write different types of altered conditions?

Add -- alter table link add address varchar(20);

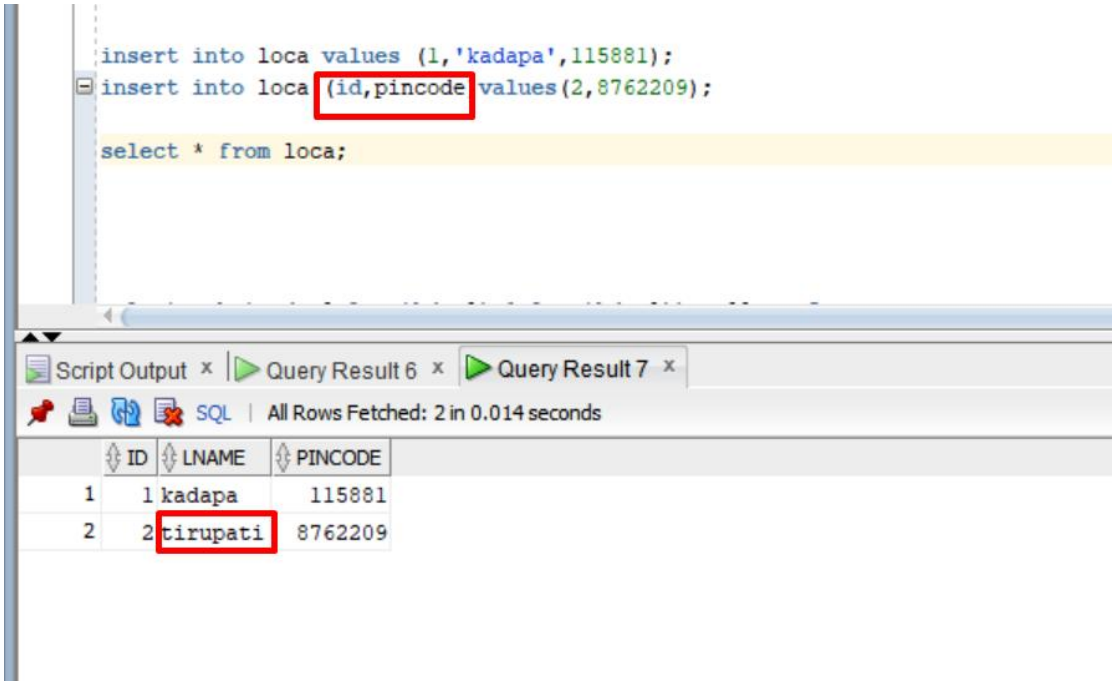
Rename -- alter table link rename column address to location;

Drop -- alter table link drop column location ;

Modify ---alter table link modify name varchar(50);

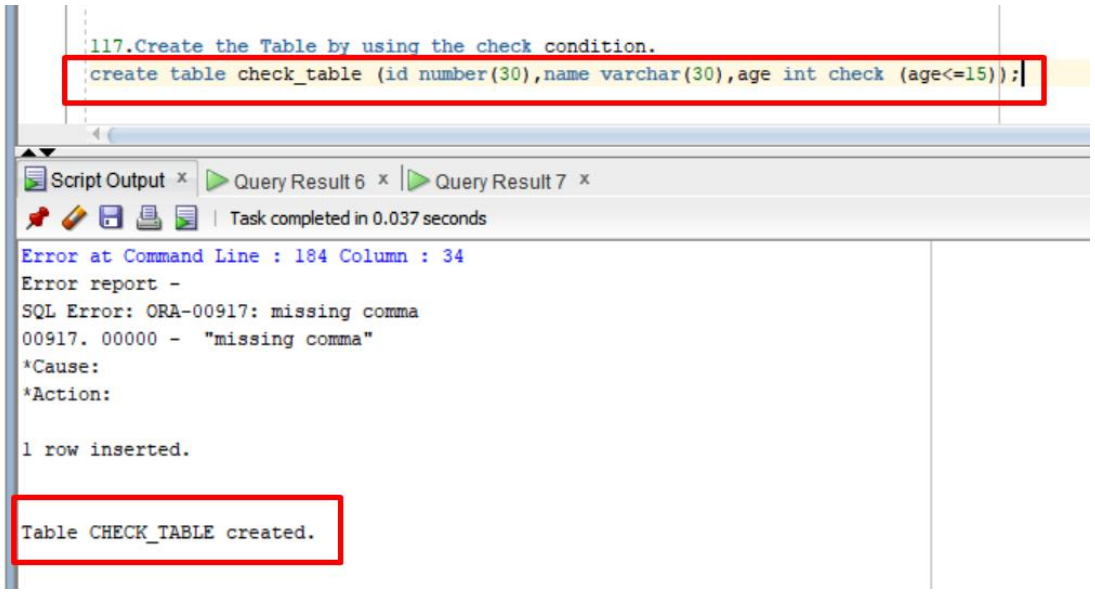


116.Create the Table by using the default condition.



117. Create the Table by using the check condition.

create table check_table (id number(30),name varchar(30),age int check (age<=15));



118.What is an index. What different types of indexes?

Indexes: - Index is used to increase performance of table,

When we create index on a table then we can retrieve data faster.

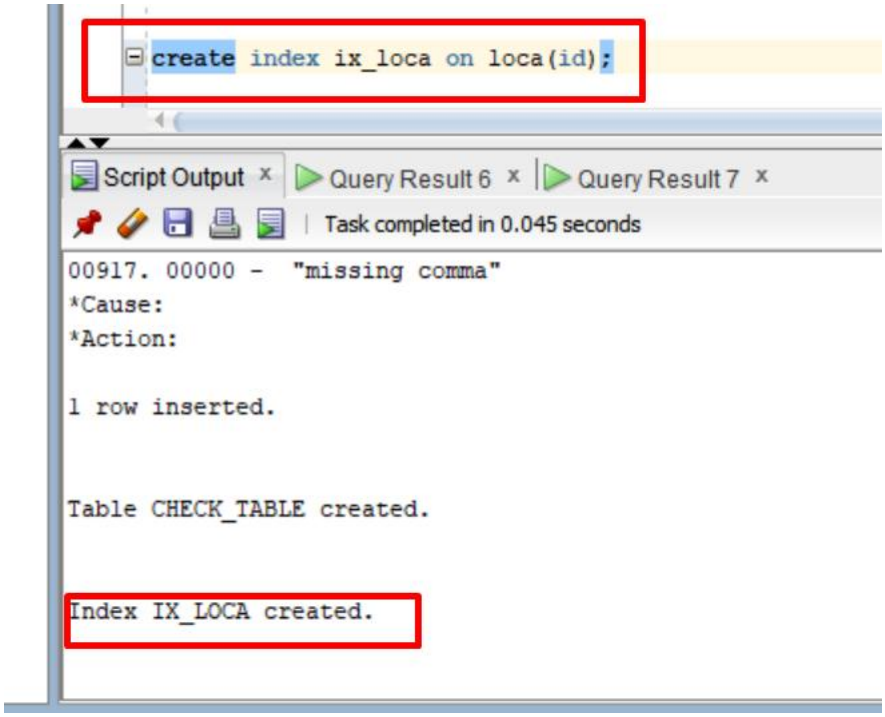
By creating index it will sort out the row in a serial wise.

It is a database object.

Types of indexes: -simple index, complex index, unique index, functional index.

Syntax: - create index index_name on tablename (columnname).

119.How to create an index in SQL?



120.What difference between Bitmap Index and index?

Each bit in the bitmap corresponds to a possible rowid, and if the bit is set, it means that the row with the corresponding rowid contains the key value. A mapping function converts the bit position to an actual rowid, so that the bitmap index provides the same functionality as a regular index. If the number of different key values is small, bitmap indexes save space.

121.How to create a multi-column index in SQL

Ans:-

Multi column index (or) Complex Index :-

It is used to create a index on multiple columns of a table.

Syntax :- create index index_name on table_name (col1, col2 ,col3…..);

122.How to create a bit map index?

Ans:-

Bitmap Index :-

It is used to create a bit map index on column.

Syntax :- create bitmap index index_name on emp (empno);

123.What is the difference between a Clustered and Non-Clustered Index?

Ans:-

Clustered:- 1. A clustered index is used to define the order or to sort the table or arrange the data by alphabetical order just like a dictionary.

2.It is faster than a non-clustered index

Non-Clustered:- 1. A non-clustered index collects the data at one place and records at another place.

2.It is slower than the clustered index.

124. write steps to export data into a table?

Ans:-

Based on the query Exporting the record query is

Go to oracle SQL Developer sheet and select * from emp;

--->Then query results in display the emp table

---> Then right clack and Export icon then clack the export icon then Export Wizard step 1 of 2 Window is open in format column select the excel 2003+(xlsx)

---> Then go to Browse and select then file patch name is saved Then clack next it will open next Export

summary window then clack to finish Export data is Completed Save the data

EXPORTING THE DATA INTO SQL DEVELOPER INTO LOCALMECHINE

125. How to delete duplicate records in a table?

Ans :-

To remove duplicate rows from a result set, you use the DISTINCT operator in the SELECT clause as follows:

Syntax :-SELECT DISTINCT column1, column2, ... FROM table1;

Syntax :- SELECT DISTINCT salary FROM employees ORDER BY salary DESC;

---> Use DISTINCT operator in the SELECT clause to remove duplicate rows from the result set.

126. How many types to find duplicate records in a table?

Ans :-

1. Using the GROUP BY clause to group all rows by the target column(s) – i.e. the column(s) you want to check for duplicate values on.
2. Using the COUNT function in the HAVING clause to check if any of the groups have more than 1 entry; those would be the duplicate values.

127. How to find duplicate records count in the table?

Ans:-

Syntax :- select distinct count (job) from emp;

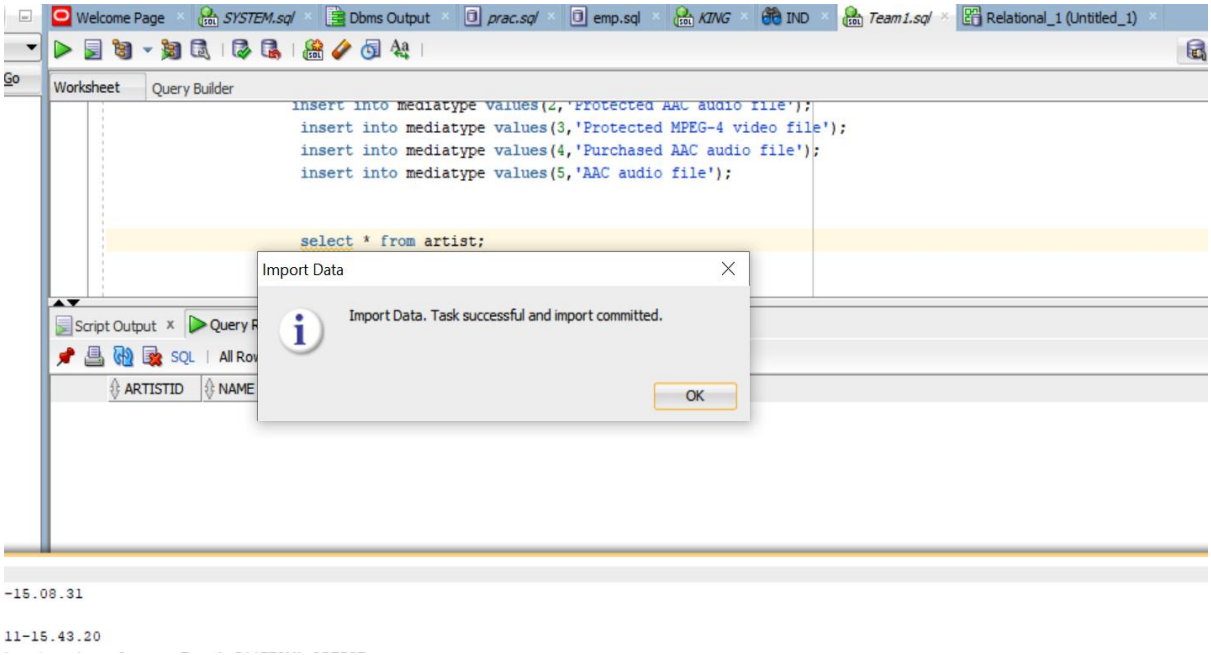
128.write steps to import data into a table?

Ans:-

SQL developer method

Steps to import data from source data

Click on schema→click on table name→ right click → import→browse file →select source file→check the data and next→then select or matched the columns check data→ finish.



129.What is a CSV file how to create CSV?

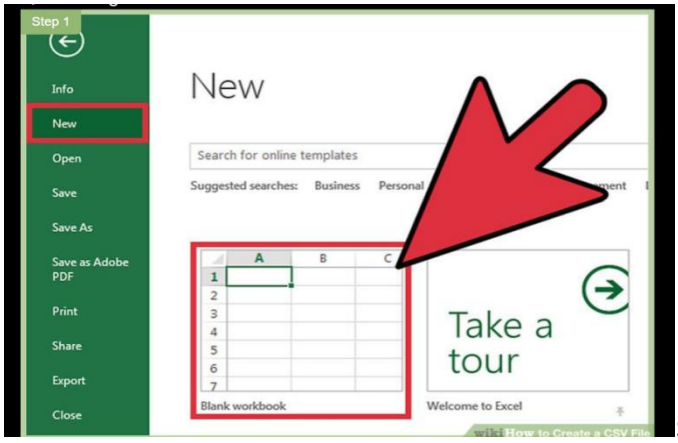
Ans:-

1.CSV stands for Comma Separated Values.

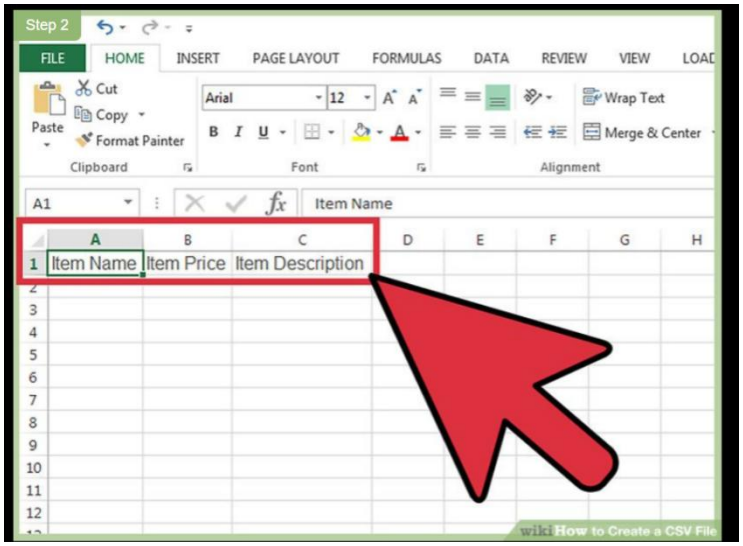
2. A CSV file is a plain text file that stores tables and spreadsheet information.

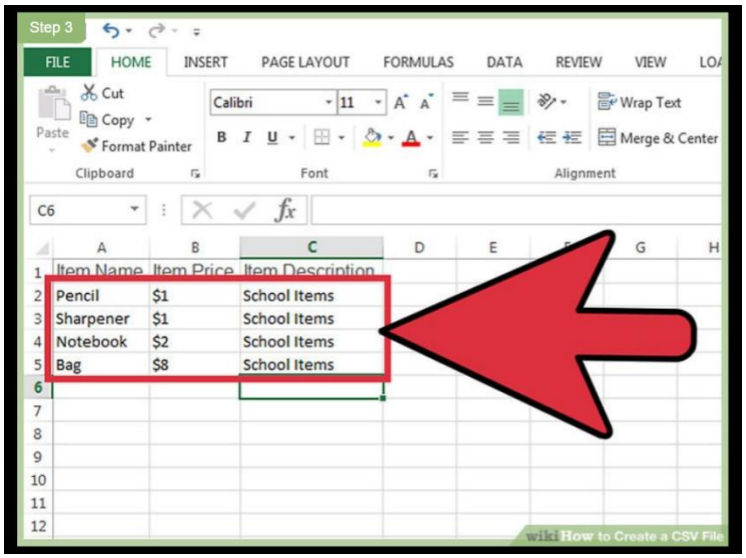
3. The contents are often a table of text, numbers, or dates.

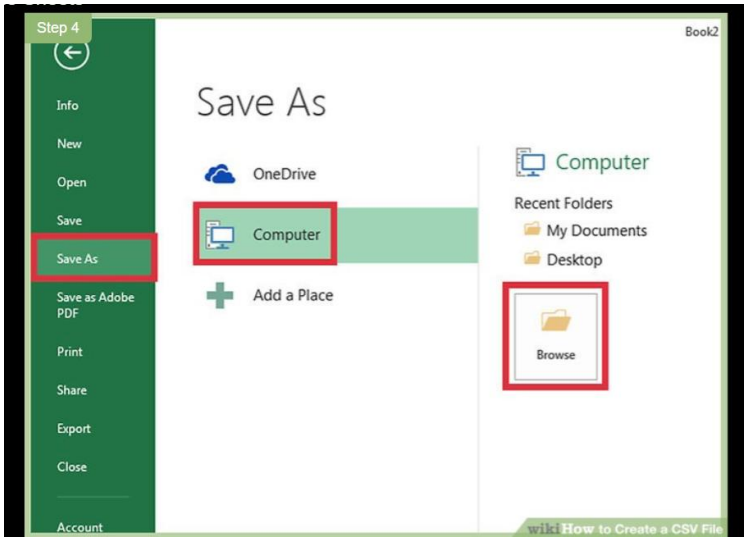
4.CSV files can be easily imported and exported using programs that store data in tables.

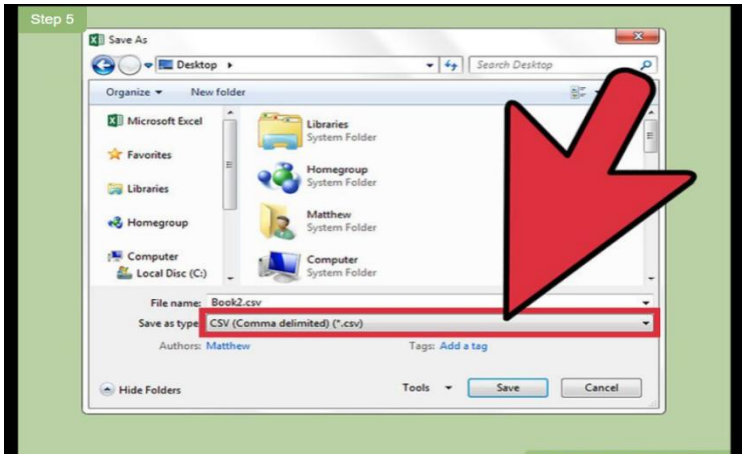


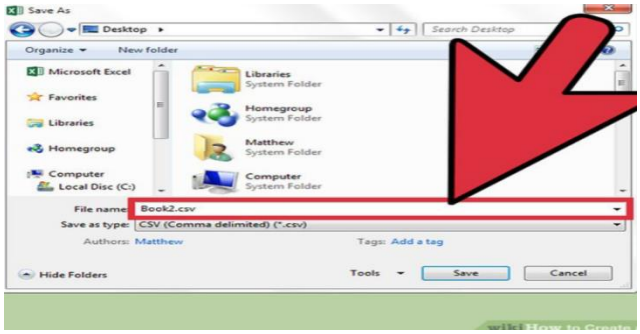
s


Step 2
FILE
HOME
INSERT
PAGE LAYOUT
FORMULAS
DATA
REVIEW
VIEW
Cut
Copy
Format Painter
Paste
Clipboard
Arial
12
Font
Wrap Text
Merge & Center
Alignment
A1
Item Name
Item Name
Item Price
Item Description
wikiHow to Create a CSV File


Step 3
FILE
HOME
INSERT
PAGE LAYOUT
FORMULAS
DATA
REVIEW
VIEW
Cut
Copy
Format Painter
Paste
Clipboard
Calibri
11
Font
Wrap Text
Merge & Center
Alignment
C6
Item Name
Item Price
Item Description
Pencil
$1
School Items
Sharpener
$1
School Items
Notebook
$2
School Items
Bag
$8
School Items
wikiHow to Create a CSV File


Step 4
Book2
Info
New
Open
Save
Save As
Save as Adobe PDF
Print
Share
Export
Close
Account
Save As
OneDrive
Computer
Add a Place
Computer
Recent Folders
My Documents
Desktop
Browse
wikiHow to Create a CSV File


Step 5
Save As
Desktop
Search Desktop
Organize
New folder
Microsoft Excel
Favorites
Libraries
Homegroup
Computer
Local Disc (C:)
Libraries
System Folder
Homegroup
System Folder
Matthew
System Folder
Computer
System Folder
File name: Book2.csv
Save as type: CSV (Comma delimited) (*.csv)
Authors: Matthew
Tags: Add a tag
Hide Folders
Tools
Save
Cancel


Save As
Desktop
Search Desktop
Organize
New folder
Microsoft Excel
Favorites
Libraries
Homegroup
Computer
Local Disc (C:)
Libraries
System Folder
Homegroup
System Folder
Matthew
System Folder
Computer
System Folder
File name: Book2.csv
Save as type: CSV (Comma delimited) (*.csv)
Authors: Matthew
Tags: Add a tag
Hide Folders
Tools
Save
Cancel

Type a name for your CSV file, then select "Save." You have now created a CSV file, and commas will automatically be added to the file to separate each field.

130.Write different types of data loading methods with ex?

LOAD DATA BY USING DIFFERENT METHODS

Type 1: - insert method

This are two types 1.direct method

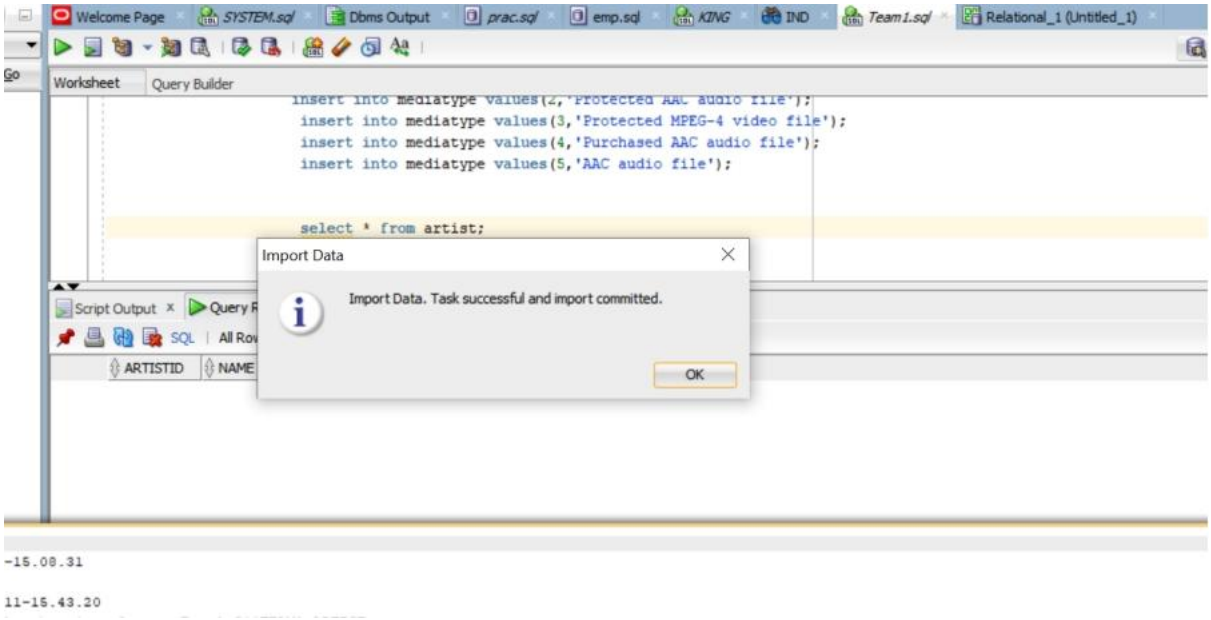
2.refernce method.

Type2

SQL developer method

Steps to import data from source data

Click on schema -click on table- click right click- browse file -select source file- check the data and next-then select or matched the columns- check data-s finish.

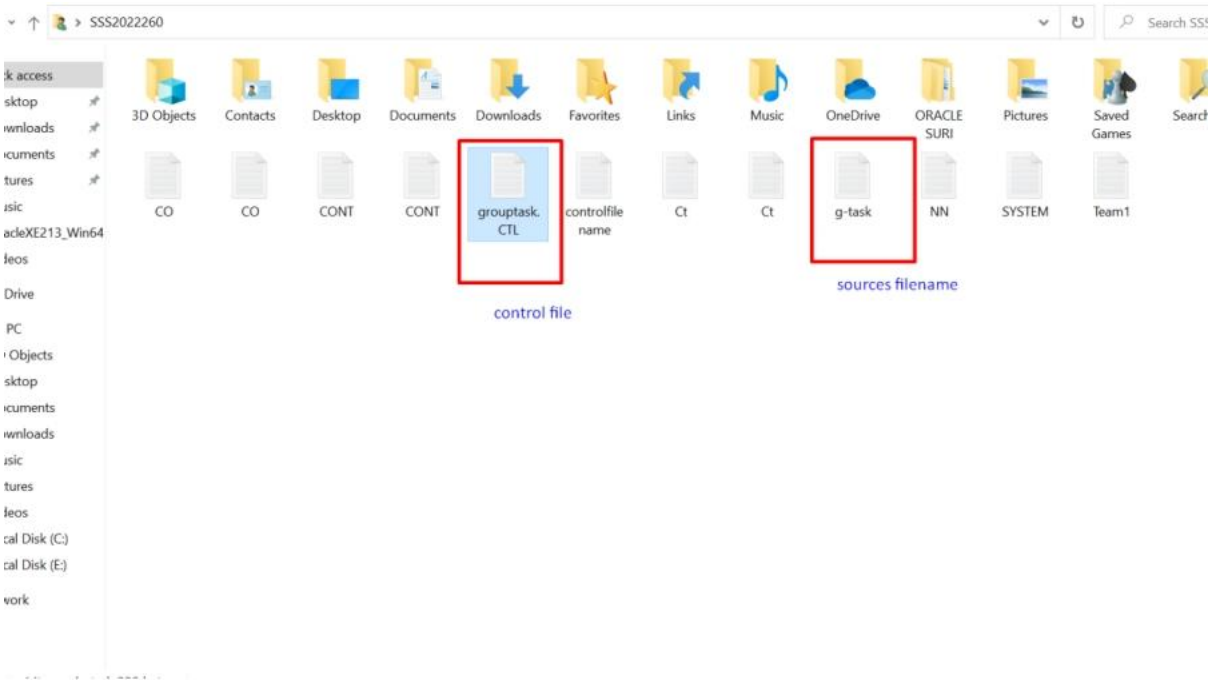


Type3

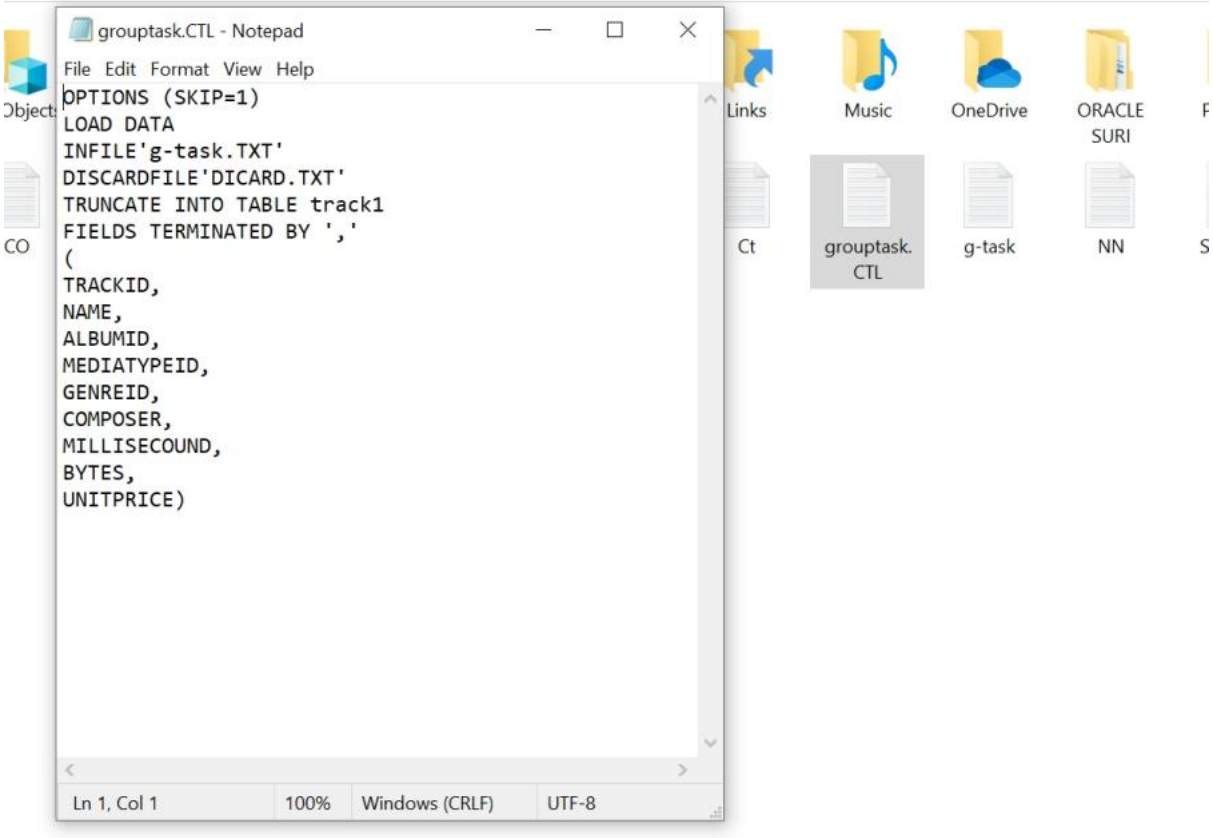
SQL star loader method

Steps followed by to insert data in sql star loader method

Create a files in admin path 1 is control file 2 is sources file

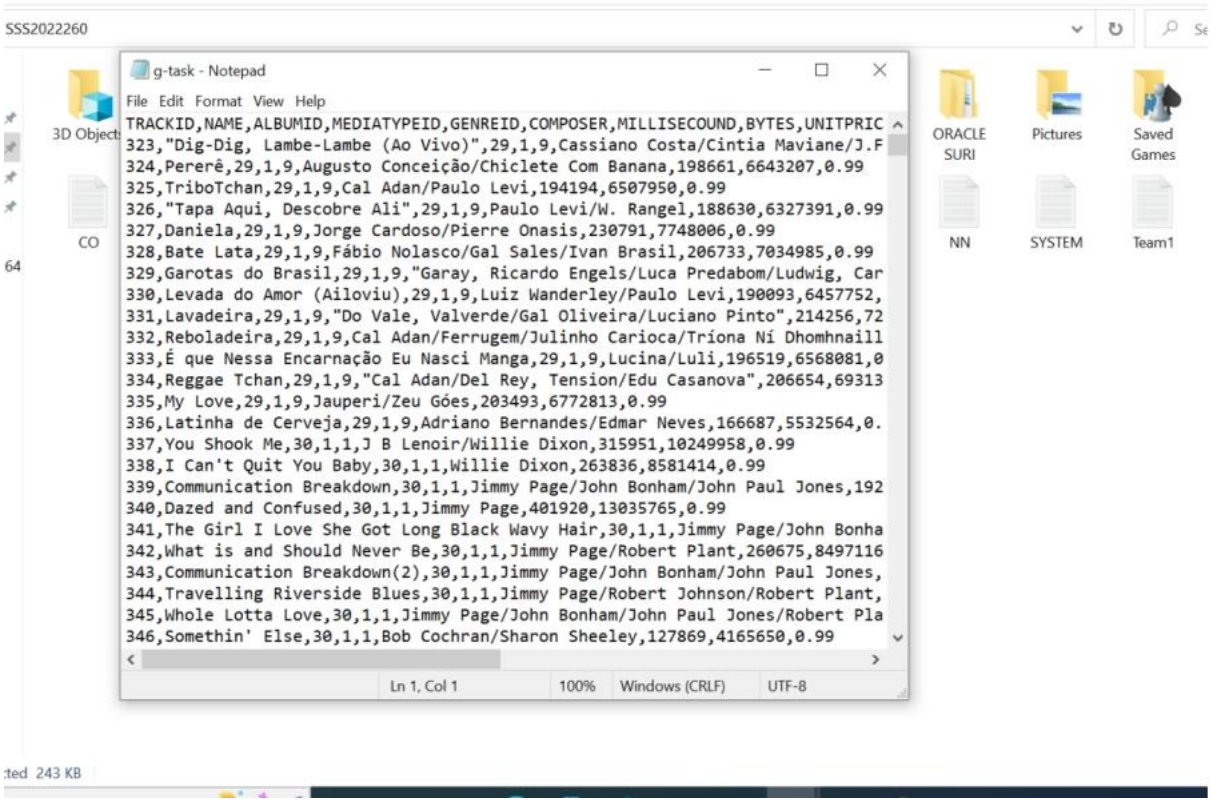


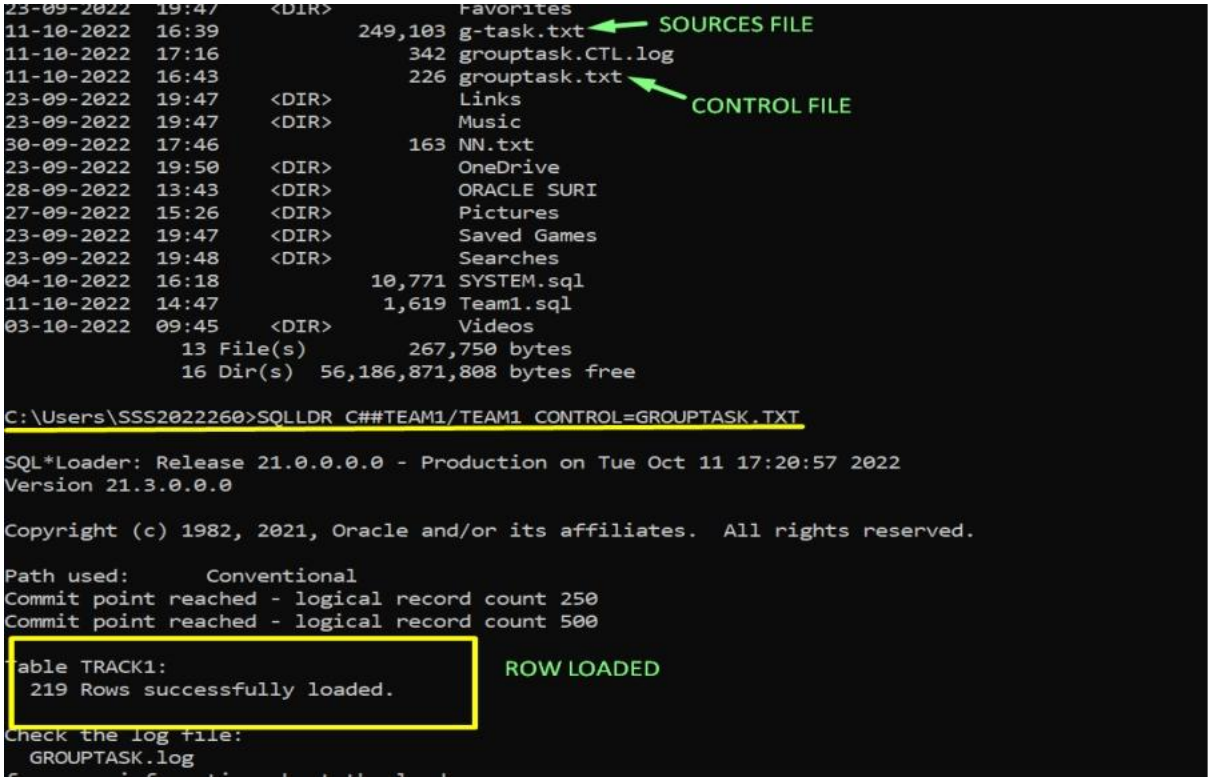
Control file



Sources file

This file contain data.

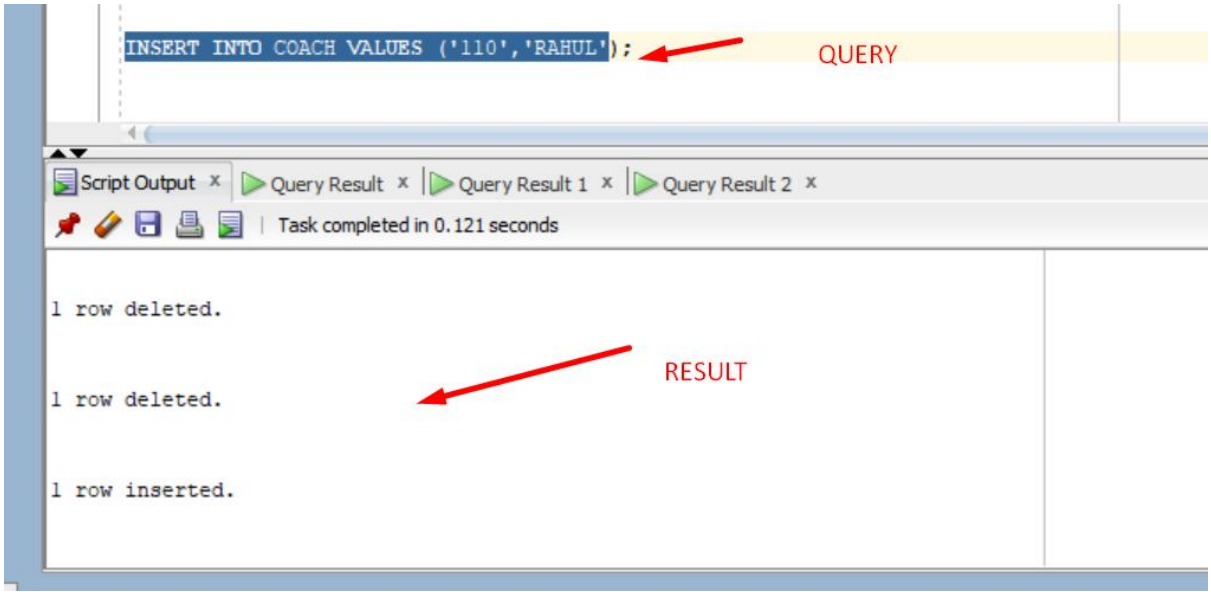




These are type to import data into database.

131. .Write a query to insert the DATE records in the table?

A. INSERT INTO COACH VALUES ('110','RAHUL');



132. Write a Query to insert time records in a table?

```
 INSERT INTO TIMES VALUES(to_date(sysdate, 'yyyy/mm/dd hh24:mi:ss'),01);
 CREATE TABLE TIMES(
IN_TIME TIMESTAMP,
SLNO NUMBER(4)
);
select*from  times;
```

t Output x | Query Result x

SQL | All Rows Fetched: 1 in 0.03 seconds

IN_TIME	SLNO
22-10-14 12:00:00.000000000 AM	1

133. Write a query to insert default constrain records in a table?

```
create table sreekar(idno number,name varchar(20) default 'chandragiri');
insert into sreekar values(4,'tirupati');
insert into sreekar values(5,'hyderabad');
insert into sreekar(idno) values(9);
select*from sreekar;
```

t Output x | Query Result x

SQL | All Rows Fetched: 3 in 0.007 seconds

IDNO	NAME
4	tirupati
5	hyderabad
9	chandragiri

134. .Write a query to update all attribute records in the table?

```
select*from sreekar;
update sreekar set idno='10',name='malasyia';
```

t Output x | Query Result x

SQL | All Rows Fetched: 3 in 0.002 seconds

IDNO	NAME
10	malasyia
10	malasyia
10	malasyia

135 .How to find duplicate records count in the table?

```
select distinct count(job),job from emp group by job;
```

Script Output x | Query Result x

SQL | All Rows Fetched: 5 in 0.005 seconds

	COUNT(JOB)	JOB
1	3	MANAGER
2	2	ANALYST
3	4	CLERK
4	4	SALESMAN
5	1	PRESIDENT

136. Write a query to delete records in a table?

```
truncate table emp;
select*from emp;
```

ipt Output × Query Result ×

SQL | All Rows Fetched: 0 in 0.005 seconds

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO

137. Write a query to delete records in an attribute?

```
delete from emp where deptno=10;
select*from emp;
```

pt Output × Query Result ×

SQL | All Rows Fetched: 11 in 0.002 seconds

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30
7876	ADAMS	CLERK	7788	23-05-87	1100	(null)	20

138. Write difference between equi joint and non equi joint?

Equi Join and Non-Equi Joins are types of Inner Joins. Equi Join in SQL is used to retrieve data from multiple tables using an equality condition with the WHERE clause. Non-Equi in SQL is used to retrieve data from multiple tables using any other operator except the equality condition.

139. .Write about delete?

DELETE: 1.Delete is a DML command

2.It is a non-autocommit command.

3. It is used to delete a particular record in a table.

4. we can rollback the data after deletion.

140. Write about Analytics Function.

Analytical function: Analytical functions in sql explains various analytical functions with suitable examples.

1. CUME_DIST
2. LEAD,LAG
3. RANK,DENSE_RANK,ROW_NUMBER
4. FIRST,LAST
5. FIRST_VALUE,LAST_VALUE,NTH_VALUE
6. NTILE

141. List the details of the emps whose Salaries more than the employee BLAKE.

A. Select * from emp where sal > (select sal from emp where ename='BLAKE');

```
select * from emp where sal > (select sal from emp where ename='BLAKE');
```

Script Output | Query Result

SQL | All Rows Fetched: 4 in 0.006 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
2	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
3	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
4	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10

142. Display the employees details to get the particular maximum salary employee?

A. SELECT * FROM EMP WHERE SAL=(SELECT MAX(SAL) FROM EMP);

```
SELECT * FROM EMP WHERE SAL=(SELECT MAX(SAL) FROM EMP);
```

Script Output | Query Result

SQL | All Rows Fetched: 1 in 0.016 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10

143. write about Clusters and explain it?

A. A cluster is a schema object that contains data from one or more tables, all of which have one or more columns in common. Oracle Database stores together all the rows from all the tables that share the same cluster key.

Clusters in SQL are used to store data that is from different tables in the same physical data blocks. They are used if records from those tables are frequently queried together. By storing same data blocks, the number of database block reads needed to full fill such queries decreases which improves performance.

- Each cluster stores tables data and maintains a clustered index to sort data.
- Columns within the cluster index are called clustered keys. These determine the physical placement of rows within the cluster.
- Cluster key is usually a foreign key of one table that references the primary key of another table in cluster.

144. write about decode and explain it with ex?

A. DECODE compares the expression to each search value one by one.

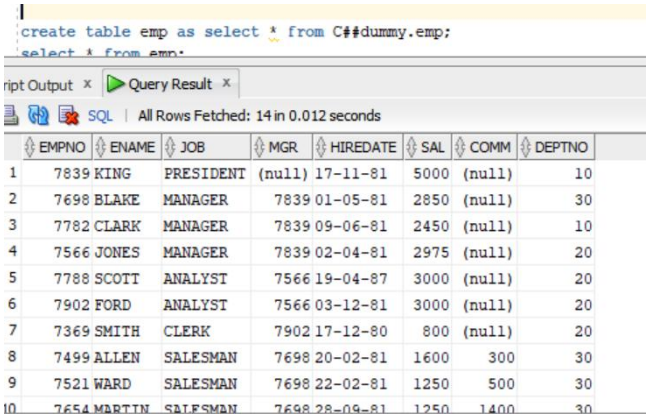
If expression is equal to a search, then the corresponding result is returned by the Oracle Database. If a match is not found, then default is returned. If default is omitted, then Oracle returns null.

- It is use to replace the more than one string
- It works like the if condition but it not allow relations operators.

Ex: select job decode (job,'managre','mgr','clerk','clk',job) from dual;

145.Write a query to create a backup table with records in another database as same table name?

A. CREATE TABLE Table_Name AS SELECT * FROM Source_Table_Name;



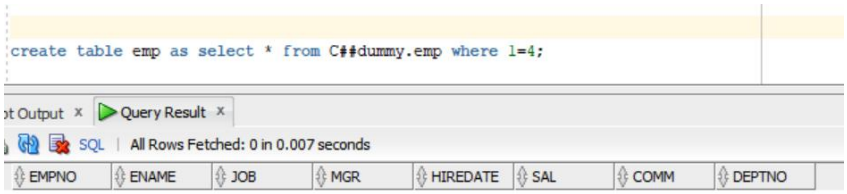
```
create table emp as select * from C##dummy.emp;
select * from emp;
```

Query Result | SQL | All Rows Fetched: 14 in 0.012 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10
2	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
3	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
4	7566	JONES	MANAGER	7839	02-04-81	2975	(null)	20
5	7788	SCOTT	ANALYST	7566	19-04-87	3000	(null)	20
6	7902	FORD	ANALYST	7566	03-12-81	3000	(null)	20
7	7369	SMITH	CLERK	7902	17-12-80	800	(null)	20
8	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
9	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
10	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30

146.Write a query to create a backup table with no records in another database as same table name?

A. create table emp as select * from C##dummy.emp where 1=4;



```
create table emp as select * from C##dummy.emp where 1=4;
```

Query Result | SQL | All Rows Fetched: 0 in 0.007 seconds

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO

147.Write a query to create a backup table of emp with location as CHICAGO in another database as same table name?

A. create table SURI as select * from C##DUMMY.emp where DEPTNO IN (SELECT DEPTNO FROM DEPT WHERE LOC='CHICAGO');

```
SELECT * FROM SURI;
```

Query Result — All Rows Fetched: 6 in 0.012 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
2	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
3	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
4	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
5	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30
6	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30

148. Write a query to create a backup table of emp with dname as accounting in another database as same table name?

A. create table NIKE as select * from C##DUMMY.emp where DEPTNO IN (SELECT DEPTNO FROM DEPT WHERE DNAME='ACCOUNTING');

```
create table NIKE as select * from C##DUMMY.emp where  DEPTNO IN (SELECT DEPTNO FROM DEPT WHERE DNAME='ACCOUNTING');

SELECT * FROM NIKE;
```

Query Result — All Rows Fetched: 3 in 0.003 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7839	KING	PRESIDENT	(null)	17-11-81	5000	(null)	10
2	7782	CLARK	MANAGER	7839	09-06-81	2450	(null)	10
3	7934	MILLER	CLERK	7782	23-01-82	1300	(null)	10

149. Write a query to create a backup table of emp with dname as sales in another database as same table name?

A. create table KUMAR as select * from C##DUMMY.emp where DEPTNO IN (SELECT DEPTNO FROM DEPT WHERE DNAME='SALES');

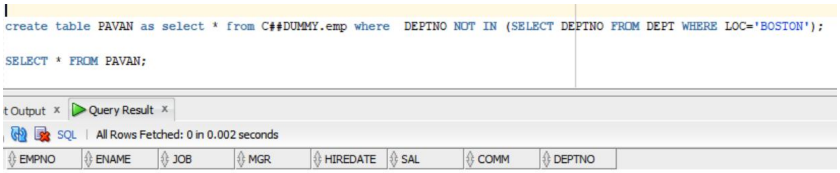
```
create table KUMAR as select * from C##DUMMY.emp where  DEPTNO IN (SELECT DEPTNO FROM DEPT WHERE DNAME='SALES');

SELECT * FROM KUMAR;
```

Query Result — All Rows Fetched: 6 in 0.002 seconds

	EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
1	7698	BLAKE	MANAGER	7839	01-05-81	2850	(null)	30
2	7499	ALLEN	SALESMAN	7698	20-02-81	1600	300	30
3	7521	WARD	SALESMAN	7698	22-02-81	1250	500	30
4	7654	MARTIN	SALESMAN	7698	28-09-81	1250	1400	30
5	7844	TURNER	SALESMAN	7698	08-09-81	1500	0	30
6	7900	JAMES	CLERK	7698	03-12-81	950	(null)	30

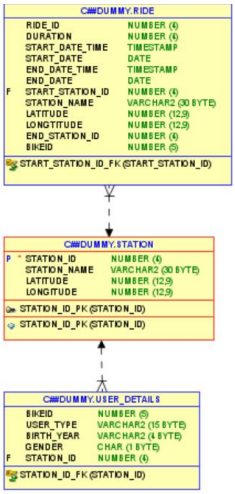
150.Write a query to create a backup table of emp with loc as bostan in another database as same table name?

A. create table PAVAN as select * from C##DUMMY.emp where DEPTNO NOT IN (SELECT DEPTNO FROM DEPT WHERE LOC='BOSTON');



151.What is the E-R model?

A. Entity-Relationship (ER) model is a visual representation of the table's structure and the relationships between logically related tables. In ER modeling the database structure is represented as a diagram known as ER diagram (ERD). An ER diagram gives a better understanding of the overall database structure.



152.Many-to-many relationships in er diagram?

A. Many to many relationship is type of cardinality that refers to a relation between two entities in ENTITY RELATIONSHIP DIAGRAM (Between two tables in a database).A simple example can have multiple courses and each course is for multiple students.

153. Many-to-one relationship?

A. Many-to-One relationship in DBMS is a relationship between more than one instances of an entity with one instance of another entity.

154. One-to-many relationship?

A. One-to-Many relationship in DBMS is a relationship between instances of an entity with more than one instance of another entity.

155. Notation of ER diagram with example diagram?

A. if you right click over an empty area of your ER diagram (LOGICAL MODEL) then the drop-down menu has a notation option that allows you to choose barker, Bachman or information engineering notation.

156. Mapping Constraints in ER diagram?

A. A mapping constraint is a data constraint that expresses the number of entities to which another entity can be related via a relationship set. It is most useful in describing the relationship sets that involve more than two entity sets.

157. write about case and explain with ex?

A. It is use to replace mora then one string by using relation operators

EX:SELECT CASE WHEN DEPTNO=10 AND JOB='MANAGER' THEN MGR ELSEJOB END J FROM EMP;

158. write about Conversion Functions and explain with ex?

The conversion function are there types

- To_date: it is used to convert system format into user format.
  Ex:select to_char ('21','dd') from dual;
- To_char: it is used to convert user format into user format
  Ex: select to_char(sysdate,'day') from dual;
- To_number: it is used to translate the value of char or varchar data type in to number formate.
  Ex:select to_number('20') from dual;

159. write difference between replace and translate?

A. REPLACE: it is used to replace entire string and its not possible to replace more then one string.

TRANSLATE: it is used to translate the character wise in a given string, if the character is found. And its not possible to translate entire string.

160. write about Concat and explain it?

A. CONCAT: it is used to merge the two strings. And we have to use '||' symbol while merge the two strings.

Syntax: select concat('abc','limited') from dual;