Ex.No.5	VIEW AND INDEX
12.03.2025	

SQL> create table emp1(name varchar(10),emp_no number(5),salary number(10),deptno number(10));

Table created.

SQL> insert into emp1 values('kabesh',075,19000,11);

1 row created.

SQL> insert into emp1 values('kamalesh',076,23000,12);

1 row created.

SQL> insert into emp1 values('jegan',073,27000,13);

1 row created.

SQL> insert into emp1 values('jeyasanjay',074,32000,14);

1 row created.

SQL> create view v1 as select name,emp_no,salary,deptno from emp1 where deptno=12;

View created.

SQL> select * from v1;

NAME   EMP_NO   SALARY   DEPTNO

```
---------- ---------- ---------- ----------

kamalesh      76    23000      12


SQL> create view v2 as select name,emp_no,salary,deptno from emp1;


View created.


SQL> select * from v2;


NAME      EMP_NO   SALARY   DEPTNO

---------- ---------- ---------- ----------

kabesh      75    19000      11

kamalesh     76    23000      12

jegan       73    27000      13

jeyasanjay    74    32000      14


SQL> create view v3 as select name,emp_no from emp1;


View created.


SQL> select * from v3;


NAME      EMP_NO

---------- ----------

kabesh      75

kamalesh     76

jegan       73

jeyasanjay    74


SQL> create table dept1(deptno number(10),dept_name varchar(10));
```
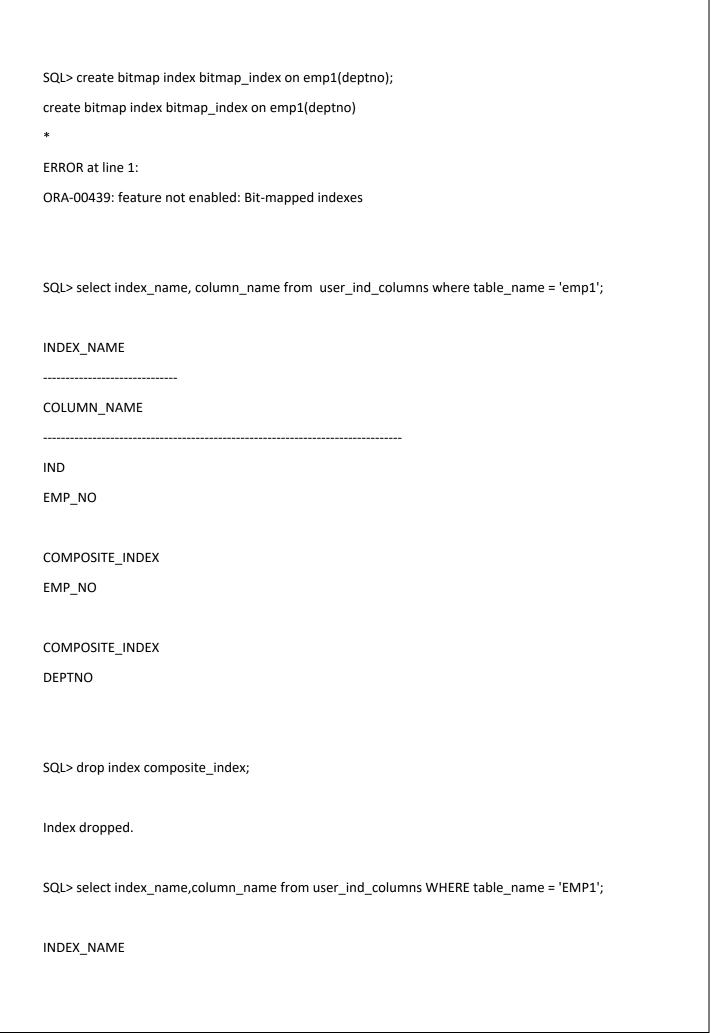
Table created.

SQL> insert into dept1 values(11,'Finance');

1 row created.

SQL> insert into dept1 values(13,'Sales');

1 row created.

SQL> insert into dept1 values(14,'Production');

1 row created.

SQL> insert into dept1 values(12,'Marketing');

1 row created.

SQL> create view combo as select name,emp_no,salary,dept1.deptno,dept_name from emp1,dept1 where emp1.deptno=dept1.deptno;

View created.

SQL> select * from combo;

```
NAME        EMP_NO    SALARY    DEPTNO DEPT_NAME
---------- ---------- ---------- ---------- ----------
kabesh         75     19000        11 Finance
jegan          73     27000        13 Sales
jeyasanjay     74     32000        14 Production
kamalesh       76     23000        12 Marketing
```

SQL> insert into combo values('john',12,10000,16,'worker');

insert into combo values('john',12,10000,16,'worker')

*

ERROR at line 1:

ORA-01779: cannot modify a column which maps to a non key-preserved table

INDEX:

SQL> create index ind on emp1(emp_no);

Index created.

SQL> Sselect index_name, column_name from user_ind_columns where index_name = 'ind';

INDEX_NAME

COLUMN_NAME

IND

EMP_NO

SQL> create index composite_index on emp1(emp_no, deptno);

Index created.

SQL> SELECT * FROM emp1 WHERE emp_no = 075 AND deptno = 11;

NAME	EMP_NO	SALARY	DEPTNO
kabesh	75	19000	11

```
SQL> create bitmap index bitmap_index on emp1(deptno);
create bitmap index bitmap_index on emp1(deptno)
*
ERROR at line 1:
ORA-00439: feature not enabled: Bit-mapped indexes


SQL> select index_name, column_name from  user_ind_columns where table_name = 'emp1';


INDEX_NAME
----------------------------
COLUMN_NAME
--------------------------------------------------------------------------------
IND
EMP_NO


COMPOSITE_INDEX
EMP_NO


COMPOSITE_INDEX
DEPTNO


SQL> drop index composite_index;


Index dropped.


SQL> select index_name,column_name from user_ind_columns WHERE table_name = 'EMP1';


INDEX_NAME
```

```
----------------------------

COLUMN_NAME

-------------------------------------------------------------------------------

IND

EMP_NO
```

CONTENTS	MARKS ALLOTTED	MARKS OBTAINED
Aim , Algorithm, SQL,PL/SQL	30	
Execution and Result	20	
Viva	10	
Total	60	

 RESULT:
    Thus**,** virtual table created by querying data for view and data retrieval for table using index were executed.