```
INDEX TOPIC :-
→ create index job_index
on emp(job);
sol: index created.
→ desc USER_INDEXES;
Sol: Index JOB_INDEX created.
Name
                         Null?
                                                           Type
INDEX_NAME
                        NOT NULL
                                                        VARCHAR2(30)
INDEX_TYPE
                                                        VARCHAR2(27)
TABLE_OWNER
                        NOT NULL
                                                        VARCHAR2(30)
TABLE_NAME
                        NOT NULL
                                                        VARCHAR2(30)
TABLE_TYPE
                                                        VARCHAR2(11)
UNIQUENESS
                                                        VARCHAR2(9)
COMPRESSION
                                                        VARCHAR2(8)
PREFIX_LENGTH
                        NUMBER
→ SELECT INDEX_NAME, TABLE_NAME
    FROM user_indexes;
   Sol:
   SYS_C007093
                                 STUDENT_MASTER
    SYS_C007098
                                STAFF_MASTER
    JOB_INDEX
                                    EMP
    SYS_C007088
                               DESIGNATION_MASTER
    SYS_C007089
                               DESIGNATION_MASTER
    SYS_C007090
                               DEPARTMENT_MASTER
    SYS_C007091
                               DEPARTMENT_MASTER
    SYS_C007103
                               BOOK_MASTER
   → SELECT ename
   FROM emp
   WHERE job='MGR';
   SOL :- *****ENAME *****
            blake
            clark
            jones
```

```
→ SELECT ename FROM emp WHERE length(ename)>2;
    SOL:- NAMES:
    SMITH,ALLEN,WARD,JONES,MARTIN,BLAKE,CLARK,SCOTT,KING,TURNER,ADAMS,JAMES,FORD,
    MILLER
    → CREATE UNIQUE INDEX uniind ON emp(ename);
    SOL: INDEX CREATED.
    SEQUENCE:-
→ CREATE SEQUENCE idseq;
    SOL: Sequence created.
→ SELECT idseq.nextval FROM dual;
SOL:1
→ SELECT idseq.nextval FROM dual;
    SOL:2
→ SELECT idseq.nextval FROM dual;
    SOL:3
SUB QUERY:-
   1) SELECT design_code
FROM designation_master
WHERE design_name='Professor';
SOL: 102
   2) SELECT staff_name
       FROM staff master
      WHERE design_code= (SELECT design_code FROM designation_master
                            WHERE design_name='Professor');
      SOL:
              STAFF_NAME
               Arvind
               Mohan
               Anil
               Raviraj
               Rahul
               Shyam
   3) CREATE TABLE emp_copy31 AS SELECT * FROM emp;
      SOL: Table created.
   4) SELECT ename FROM emp;
      SOL: ******NAMES *****
                    ALLEN WARD JONES MARTIN BLAKE CLARK
                    SCOTT KING TURNER ADAMS JAMES FORD MILLER
```

```
SELECT ename FROM emp_copy31;
SOL: *****NAMES *****
        SMITH ALLEN WARD JONES MARTIN BLAKE CLARK
        SCOTT KING TURNER ADAMS JAMES FORD
6) CREATE TABLE design_copy AS SELECT * FROM designation_master WHERE 1=2;
Sol: table creasted
SELECT count(*) FROM designation_master;
  Sol:6
8) SELECT count(*) FROM design_copy;
   Sol:0
9) desc designation_master;
   sol : Name Null?
                         Type
                -----
                          -----
      DESIGN CODE NOT NULL NUMBER(3)
     DESIGN_NAME VARCHAR2(50)
desc design_copy;
  sol: Name Null? Type
     _____
  DESIGN_CODE NUMBER(3)
DESIGN_NAME VARCHAR2(50)
11) SELECT deptno, avg(sal) FROM emp GROUP BY deptno;
   ****Dept num********Avg Sal*******
     30
              20
              2175
               10
  12) SELECT deptno, avg(sal) FROM emp GROUP BY deptno HAVING AVG(sal)>2500;
  Sol:
       DEPTNO AVG(SAL)
                2916.666
12) SELECT deptno FROM emp GROUP BY deptno HAVING AVG(sal)>2500;
  Sol: ***** dept num*****
13) SELECT ename, deptno FROM emp WHERE deptno IN
         (SELECT deptno FROM emp GROUP BY deptno HAVING AVG(sal)>2500);
  Sol: ENAME
                DEPTNO
       -----
                _____
        Clark
                   10
        King
                   10
        Miller
                   10
14) SELECT ename, deptno FROM emp WHERE deptno NOT IN
```

(SELECT deptno FROM emp GROUP BY deptno HAVING AVG(sal)>2500);

```
Sol: *****ENAME*****DEPTNO***
             SMITH
                         20
             ALLEN
                         30
            WARD
                         30
            JONES
                         20
            MARTIN
                         30
            BLAKE
                         30
            SCOTT
                         20
            TURNER
                         30
                         20
            ADAMS
            JAMES
                         30
                         20
            FORD
   15) SELECT ename, empno FROM emp CONNECT BY empno=mgr START WITH ename='blake';
           ENAME
                      EMPNO
                     7698
            blake
   16) SELECT ename, sal, job
        FROM emp
        WHERE sal=(SELECT avg(sal) FROM emp group by job);
      Sol: "single-row subquery returns more than one row"
   17) SELECT ename, empno FROM emp CONNECT BY prior empno=mgr
       START WITH ename='blake';
   Sol: ENAME
                  EMPNO
                  -----
         blake
                  7698
         allen
                  7499
         ward
                  7521
                  7654
         martin
   *********************
SYNONYM :-
   1) SELECT ename FROM emP;
      SOL: ***NAMES***
               ALLEN
               WARD
               JONES
               MARTIN
               BLAKE
                CLARK
```

SCOTT

2)	SELECT ename FROM emp WHERE deptno=10;								
	SO	L:	ENAME						
			CLERK						
			MILLE KING	ĸ					
			KIIVO						
3)	CR	EATE	SYNO	NYM em	p FOR Emp;				
				creadte					
4)	DF	ROP S	YNON	YM emp	;				
		-	_	/I DROPF					
5)					NYM test FOR emp;				
۲)			_	M CREA					
6)		DROP PUBLIC SYNONYM TEST							
	SOL :PUBLIC SYNONYM DROPPED								

	TA	TABLE1:							
	1)				rrses(courseid NUMBER PRIMARY KEY,name VARCHAR2(20));				
		SOL	: TABI	E CREAT	TED .				
	21	DDC)D T	I F agus					
	2)			LE cours	ses; SES dropped.				
		30L	. 140	e cook	ses dropped.				
	3)	CRE	ATE TA	ABLE cou	rses(courseid NUMBER,name VARCHAR2(20),				
	•								
	CONSTRAINT cid_pk PRIMARY KEY(courseid));								
		SOL	: Table	created	l.				
	4)	des	cours	ses;					
	,	SOL		•					
		Nan	ne	Null?	Туре				
									
				NOT NU	JLL NUMBER				
		NAN	ИE		VARCHAR2(20)				
	5)	ΔΙΤ	LTER TABLE courses DROP CONSTRAINT cid. nk.						
	 ALTER TABLE courses DROP CONSTRAINT cid_pk; SOL: Table COURSES altered. 								
		502			olo discredi				
	6)	des	cours	ses;					
		SOL	:						
		Nan	ne	Null?	Туре				
			JRSEID		NUMBER				
		INΑľ	ИE		VARCHAR2(20)				

7) TRUNCATE TABLE courses;

SOL: Table COURSES truncated.

8) ALTER TABLE courses ADD CONSTRAINT cid_pk PRIMARY KEY(courseid);

SOL: Table COURSES altered.

9) DESC EMP;

•		
SOL: Name	Null?	Type
EMPNO	NOT NULL	NUMBER(4)
ENAME		VARCHAR2(10)
JOB		VARCHAR2(9)
MGR		NUMBER(4)
HIREDATE		DATE
SAL	1	NUMBER(7,2)
COMM	N	NUMBER(7,2)
DEPTNO	1	NUMBER(2)

10) alter table emp rename to emp_22;

SOL: TABLE ALTERED

11) desc emp

SOL: ORA-04043: object emp does not exist

12) desc emp_22;

SOL:	Name	Null?	Туре
	EMPNO	NOT NULL	NUMBER(4)
	ENAME		VARCHAR2(10)
	JOB		VARCHAR2(9)
	MGR		NUMBER(4)
	HIREDA	ΤΕ	DATE
	SAL		NUMBER(7,2)
	COMM		NUMBER(7,2)
	DEPTNC)	NUMBER(2)

13) alter table emp rename column id to empno;

SOL: 00942. 00000 - "table or view does not exist"

14) ALTER TABLE EMP_22 SET UNUSED COLUMN sal;

SOL: Table EMP_22 altered.

15) desc emp	0_22;	
	SOL : Name	Null?	Туре
		NOT NULL	NUMBER(4)
	ENAME		VARCHAR2(10)
	JOB MGR		VARCHAR2(9) NUMBER(4)
	HIREDAT	F	DATE
	COMM	_	NUMBER(7,2)
	DEPTNO		NUMBER(2)
******	******	******	****************
VIEWS TO	PIC :-		
→ \$01> ¢	select enar	na FROM am	ployee WHERE deptno=20;
SOL:	select ellal	TIE FROIVI EITI	pioyee Witche depthio-20,
ENAME			
jones			
scott			
→ SQL>	CREATE VII	EW viewdemo	o1 AS SELECT ename FROM employee WHERE deptno=10;
View creat	ed.		
→ SOI>9	SFLECT * F	ROM viewder	mo1·
ENAME	, ,		
king			
blake			
clark			
→ SQL>	CREATE VII	EW viewdemo	o1 AS SELECT ename FROM employee WHERE deptno=20;
CREATE VI			
ERROR at I	ine 1:		
ORA-0095	5: name is	already used	by an existing object

- → CREATE OR REPLACE VIEW viewdemo1 AS SELECT ename FROM employee WHERE deptno=20; View created.
- → CREATE VIEW viewdemo2 AS SELECT * FROM dept_details; View created.

→ SELECT * FROM dept_details;

DEPTNO	DNAME	LOC
1	training	chennai
4	admin	pune
6	admin	pune
8	admin	pune

→ SELECT * FROM viewdemo2;

DEPTNO	DNAME	LOC
1	training	chennai
4	admin	pune
6	admin	pune
8	admin	pune
2000	admin	pune
2005	admin	pune

- → INSERT INTO viewdemo2 VALUES(10,'dd','f');
- 1 row created.

→ SELECT * FROM viewdemo2;

DEPTNO	DNAME	LOC
1	training	chennai
4	admin	pune
6	admin	pune
8	admin	pune
2000	admin	pune

→ SELECT * FROM dept_details;

DEPTNO	DNAME	LOC
1	training	chennai
4	admin	pune
6	admin	pune
8	admin	pune
2000	admin	pune
2005	admin	pune