**SQL Assignment**

1. Create the following table DEPT\_<EMPNO>

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraint** |
| DEPTNO | INTEGER | PK |
| DNAME | VARCHAR2(20) | NN |
| LOC | VARCHAR2(20) | NN |

ANS: create table DEPT\_1229683(DEPTNO integer Primary key,DNAME varchar2(20) Not Null,LOC varchar2(20) Not Null);

1. Create the following Table EMP\_<EMPNO>.

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Constraint** |
| EMPNO | INTEGER | PK |
| ENAME | VARCHAR2(20) | NN |
| JOB | VARCHAR2(20) | NN |
| MGR | INTEGER | FK(EMPNO) |
| HIREDATE | DATE |  |
| SAL | NUMBER(10,2) | CHECK>5000 |
| DEPTNO | INTEGER | FK(DEPTNO) |

ANS: create table EMP\_1229683(EMPNO integer Primary key,ENAME varchar2(20) Not Null,JOB varchar(20) Not Null,MGR integer ,HIREDATE date,SAL number(10,2),DEPTNO integer,foreign key(MGR) references EMP\_1229683(EMPNO) , foreign key(DEPTNO) references DEPT\_1229683(DEPTNO),check(sal>5000));

1. Create a Sequence SEQ\_Deptno and SEQ\_Empno and use this sequence in your insert statements.

ANS: CREATE SEQUENCE DEPTNO\_seq START WITH 10 INCREMENT BY 1 NOCACHE NOCYCLE;

Sequence created.

SQL> CREATE SEQUENCE EMPNO\_seq START WITH 101 INCREMENT BY 1 NOCACHE NOCYCLE;

Sequence created.

SQL> insert into EMP\_1229683 (EMPNO,DEPTNO)

values(EMP\_1229683\_seq.nextval, 101,10)

returning EMPNO,DEPTNO into :seqval

1. INSERT the following data into both the table.

|  |  |  |
| --- | --- | --- |
| **DEPTNO** | **DNAME** | **LOC** |
| 10 | COMPUTERS | BDC |
| 20 | ADMINISTRATION | CDC |
| 30 | SALES | HDC |

ANS: SQL> insert into DEPT\_1229683 values(10,'COMPUTERS','BDC');

1 row created.

SQL> insert into DEPT\_1229683 values(20,'ADMINISTRATION','CDC');

1 row created.

SQL> insert into DEPT\_1229683 values(30,'SALES','HDC');

1 row created.

1. INSERT the following data into the table

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | DEPTNO |
| 101 | JACK | PRESESIDENT |  | 12-JAN-2000 | 7500 | 10 |
| 102 | JAYDEN | MANAGER | 101 | 14-JAN-2000 | 6200 | 10 |
| 103 | ALEX | PROGRAMMER | 102 | 15-JAN-2000 | 5500 | 10 |
| 104 | RAJA | MANAGER | 101 | 24-JAN-2000 | 6700 | 20 |

ANS: SQL> insert into EMP\_1229683 values(101,'JACK','PRESESIDENT',NULL,TO\_DATE('12-JAN-2000','DD-MON-YYYY'),7500,10);

1 row created.

SQL> insert into EMP\_1229683 values(102,'JAYDEN','MANAGER',101,TO\_DATE('14-JAN-2000','DD-MON-YYYY'),6200,10);

1 row created.

SQL> insert into EMP\_1229683 values(103,'ALEX','PROGRAMMER',102,TO\_DATE('15-JAN-2000','DD-MON-YYYY'),5500,10);

1 row created.

SQL> insert into EMP\_1229683 values(104,'RAJA','MANAGER',101,TO\_DATE('24-JAN-2000','DD-MON-YYYY'),6700,20);

1 row created.

1. Create a View MY\_V1 that has Dname and sum of salary for each Dname.(Use Scalar Sub Query)

ANS: CREATE VIEW MY\_V1 AS SELECT (SELECT DNAME FROM DEPT\_1229683) AS DNAME,(SELECT SUM(SAL) FROM EMP\_1229683) AS SAL FROM DEPT\_1229683,EMP\_1229683 GROUP BY DNAME;

1. Create a Synonym M\_S1 for the view MY\_V1.

ANS: create synonym MY\_S1 for MY\_V1;

1. Create a Index IX1 for ENAME.

ANS: CREATE INDEX IX1 on EMP\_1229683(ENAME);

1. Write a query that will display the source code of the view MY\_V1.

ANS: select TEXT FROM DBA\_VIEWS WHERE OWNER ='SYSTEM' AND VIEW\_NAME='MY\_V1';

1. DROP THE VIEWS,SYNONYS AND TABLES.

ANS: SQL> DROP VIEW MY\_V1;

View dropped.

SQL> DROP SYNONYM MY\_S1;

Synonym dropped.

SQL> DROP TABLE EMP\_1229683;

Table dropped.

SQL> DROP TABLE DEPT\_1229683;

Table dropped.