ORACLE LAB ASSIGNMENT - 5

1. Create View Product Name And Create Table Sales mension column Sales ID,Product ID,Product Name,Price.

- Crete table

```
SQL> CREATE TABLE Sales (
  2      Sales_ID NUMBER PRIMARY KEY,
  3      Product_ID NUMBER,
  4      Product_Name VARCHAR2(100),
  5      Price NUMBER(10, 2)
  6  );

Table created.
```

- Display table

```
SQL> desc sales;
 Name                      Null?    Type
 ------------------------- -------- ----------------
 SALES_ID                  NOT NULL NUMBER
 PRODUCT_ID                         NUMBER
 PRODUCT_NAME                       VARCHAR2(100)
 PRICE                              NUMBER(10,2)
```

- Insert data

```
SQL> INSERT INTO Sales (Sales_ID, Product_ID, Product_Name, Price)
  2  VALUES (1, 101, 'Laptop', 75000);

1 row created.

SQL>
SQL> INSERT INTO Sales (Sales_ID, Product_ID, Product_Name, Price)
  2  VALUES (2, 102, 'Mobile', 25000);

1 row created.

SQL> INSERT INTO Sales (Sales_ID, Product_ID, Product_Name, Price)
  2  VALUES (3, 103, 'Tablet', 18000);

1 row created.
```

- View sales data

```
SQL> select *from sales;

  SALES_ID PRODUCT_ID PRODUCT_NAME                                                                                    PRICE
---------- ---------- ---------------------------------------------------------------------------------------------- ----------
         1        101 Laptop                                                                                         75000
         2        102 Mobile                                                                                         25000
         3        103 Tablet                                                                                         18000
```

- Create view

```
SQL> CREATE VIEW Product_View AS
  2  SELECT  Sales_ID,Product_ID , Product_Name,Price  FROM Sales;

View created.
```

- Display view data

```
SQL> select *from product_view;

  SALES_ID PRODUCT_ID PRODUCT_NAME                                                                                    PRICE
---------- ---------- ---------------------------------------------------------------------------------------------- ----------
         1        101 Laptop                                                                                         75000
         2        102 Mobile                                                                                         25000
         3        103 Tablet                                                                                         18000
```

2. Create UNIQUE INDEX WITH Name of Index IS Employee and Table Name Is EMP and mention column EMP Name, Designation, Salary.

- Create table

```
SQL> CREATE TABLE EMP (
  2       EMP_ID NUMBER PRIMARY KEY,
  3       EMP_Name VARCHAR2(100),
  4       Designation VARCHAR2(100),
  5       Salary NUMBER(10, 2)
  6  );

Table created.
```

- Display table

```
SQL> desc emp;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 EMP_ID                                    NOT NULL NUMBER
 EMP_NAME                                           VARCHAR2(100)
 DESIGNATION                                        VARCHAR2(100)
 SALARY                                             NUMBER(10,2)
```

- Insert data

```
SQL> INSERT INTO EMP (EMP_ID, EMP_Name, Designation, Salary)
  2  VALUES (1, 'John Doe', 'Manager', 55000);

1 row created.

SQL> INSERT INTO EMP (EMP_ID, EMP_Name, Designation, Salary)
  2  VALUES (2, 'Jane Smith', 'Developer', 45000);

1 row created.

SQL> INSERT INTO EMP (EMP_ID, EMP_Name, Designation, Salary)
  2  VALUES (3, 'Sam Wilson', 'HR', 40000);

1 row created.
```

- Display data

- Create unique index

```
SQL> CREATE UNIQUE INDEX Employee
  2  ON EMP (EMP_Name, Designation, Salary);

Index created.
```

- Display index

```
SQL> SELECT index_name, table_name, uniqueness
  2  FROM USER_INDEXES
  3  WHERE table_name = 'EMP';

INDEX_NAME                     TABLE_NAME                     UNIQUENES
------------------------------ ------------------------------ ---------
SYS_C004075                    EMP                            UNIQUE
EMPLOYEE                       EMP                            UNIQUE
```

3. Create sequence inv_seq, which will generate the numbers from 1 to 999 in ascending order.

- Create sequence

```
SQL> CREATE SEQUENCE inv_seq
  2  START WITH 1
  3  INCREMENT BY 1
  4  MAXVALUE 999;

Sequence created.
```

- Display sequence 1 to 999 so on.

```
SQL> select inv_seq.nextval from dual;

   NEXTVAL
----------
         1
```

```
SQL> select inv_seq.nextval from dual;

   NEXTVAL
----------
         2

SQL> select inv_seq.nextval from dual;

   NEXTVAL
----------
         3

SQL> select inv_seq.nextval from dual;

   NEXTVAL
----------
         4

SQL> select inv_seq.nextval from dual;

   NEXTVAL
----------
         5
```

So on……

4. Use the sequence inv_seq to generate values for inv_no column in the invoice_hdr table. Note that the invoice number must start with 'I'.

- Create table

```
SQL> CREATE TABLE invoice_hdr (
  2      inv_no VARCHAR2(5) PRIMARY KEY,
  3      inv_dt DATE,
  4      clientname VARCHAR2(20)
  5  );
```

- Display table

```
SQL> desc invoice_hdr;
 Name                 Null?    Type
 -------------------- -------- ------------
 INV_NO               NOT NULL VARCHAR2(5)
 INV_DT                        DATE
 CLIENTNAME                    VARCHAR2(20)
```

- Create sequence

```
SQL> CREATE SEQUENCE inv_seq
  2  START WITH 1
  3  INCREMENT BY 1
  4  MAXVALUE 999;

Sequence created.
```

- Insert data

```
SQL> INSERT INTO invoice_hdr (inv_no, inv_dt, clientname)
  2  VALUES ('I' || inv_seq.NEXTVAL, SYSDATE, 'John Doe');

1 row created.

SQL> INSERT INTO invoice_hdr (inv_no, inv_dt, clientname)
  2  VALUES ('I' || inv_seq.NEXTVAL, SYSDATE, 'Jane Smith');

1 row created.

SQL> INSERT INTO invoice_hdr (inv_no, inv_dt, clientname)
  2  VALUES ('I' || inv_seq.NEXTVAL, SYSDATE, 'Sam Wilson');

1 row created.
```

- Display table data

```
SQL> SELECT * FROM invoice_hdr;

INV_N INV_DT    CLIENTNAME
----- --------- --------------------
I1    15-SEP-24 John Doe
I2    15-SEP-24 Jane Smith
I3    15-SEP-24 Sam Wilson
```