**NAME : MANGESH A. GHADWAJE**

**ROLL NO:24**

**BATCH : B2**

**COURSE: DBMS PRACTICAL**

**Assginment No. 2**

**Problem Statement :** Implement SQLDDL statements which demonstrate the use of SQL objects

such as Table, View, Index, Sequence, different constraints etc with

suitable example

a) Implement SQL DDL statements to demonstrate the creation of SQL objects

such as Table DONOR having attributes such DonorID , Name , BloodType ,ContactInfo ,.Age Gender

**Solution :**

:

CREATE TABLE Donor (

DonorID INT PRIMARY KEY,

Name VARCHAR(100),

BloodType VARCHAR(5),

ContactInfo VARCHAR(100),

Age INT,

Gender VARCHAR(10)

);

**b) VIEW**

CREATE VIEW DonorView AS

SELECT donor\_id, name, blood\_type, age, contact\_info

FROM Donor;

**c) INDEX**

CREATE INDEX donor\_id\_index ON Donor(donor\_id);

**d) SEQUENCE**

CREATE SEQUENCE donor\_id\_sequence

START WITH 1

INCREMENT BY 1;

**e) Constraints**

CREATE TABLE Donor (

donor\_id INT PRIMARY KEY,

name VARCHAR(100) NOT NULL,

blood\_type VARCHAR(5) NOT NULL,

age INT,

contact\_info VARCHAR(255),

CONSTRAINT chk\_age CHECK (age >= 18),

CONSTRAINT chk\_blood\_type CHECK (blood\_type IN ('A+', 'A-', 'B+', 'B-', 'AB+', 'AB-', 'O+', 'O-')),

CONSTRAINT donor\_name\_unique UNIQUE (name)

);

DML Statements

**a) INSERT**

INSERT INTO Donor (DonorID, Name, BloodType, ContactInfo, Age, Gender)

VALUES (1, 'Prashant Dasnur', 'O+', '9021648546', 22, 'Male');

**b) SELECT**

Retrieving all columns

i) SELECT donor\_id, name, blood\_type, age, contact\_info

FROM Donor;

To filter result based on certain conditions

ii) SELECT donor\_id, name

FROM Donor

WHERE age > 25;

**c) UPDATE**

i)

UPDATE Donor

SET age = 35

WHERE donor\_id = 1;

ii) UPDATE using Conversion function

-- Update the age column in the Donor table by increasing it by 10%

UPDATE Donor

SET age = CAST(age \* 1.1 AS INT);

**d)DELETE**

i) DELETE using Aggregate function:

-- Delete donors whose age is below the average age

DELETE FROM Donor

WHERE age < (SELECT AVG(age) FROM Donor);

ii)DELETE using Character function

-- Delete donors whose names start with the letter 'P'

DELETE FROM Donor

WHERE LEFT(donor\_name, 1) = 'P';