

## DDL COMMANDS

```
CREATE DATABASE OrganDonationDB;
```

```
USE OrganDonationDB;
```

```
CREATE TABLE Manager (  
    MGRID INT PRIMARY KEY AUTO_INCREMENT,  
    Name VARCHAR(100) NOT NULL,  
    Location VARCHAR(100) NOT NULL  
);
```

```
CREATE TABLE Blood (  
    BloodID INT PRIMARY KEY AUTO_INCREMENT,  
    BloodGroup VARCHAR(10) NOT NULL,  
    QuantityAvailable INT CHECK (QuantityAvailable >= 0),  
    StorageLocation VARCHAR(100)  
);
```

```
CREATE TABLE Hospital (  
    HospitalID INT PRIMARY KEY AUTO_INCREMENT,  
    Name VARCHAR(100) NOT NULL,  
    Location VARCHAR(100),  
    Contact VARCHAR(15),  
    Manager VARCHAR(100)  
);
```

```
CREATE TABLE BloodBank (  
    BloodBankID INT PRIMARY KEY AUTO_INCREMENT,  
    Name VARCHAR(100) NOT NULL,  
    Location VARCHAR(100),  
    Contact VARCHAR(15)  
);
```

```
CREATE TABLE ClinicalAnalyst (  
    ClinicalAnalystID INT PRIMARY KEY AUTO_INCREMENT,  
    Name VARCHAR(100) NOT NULL  
);
```

```
CREATE TABLE Patient (  
    PatientID INT PRIMARY KEY AUTO_INCREMENT,  
    Name VARCHAR(100) NOT NULL,  
    Age INT CHECK (Age > 0),  
    Gender ENUM('Male', 'Female', 'Other') NOT NULL,  
    BloodGroup VARCHAR(10),  
    Disease VARCHAR(100),  
    OrganRequired VARCHAR(50),  
    DateOfRequest DATE,  
    Contact VARCHAR(15),  
    Address TEXT  
);
```

```
CREATE TABLE Donor (  
    DonorID INT PRIMARY KEY AUTO_INCREMENT,  
    Name VARCHAR(100) NOT NULL,
```

```
Age INT CHECK (Age > 0),
Gender ENUM('Male', 'Female', 'Other') NOT NULL,
BloodGroup VARCHAR(10) NOT NULL,
OrganType VARCHAR(50),
Disease VARCHAR(100),
DateOfDonation DATE,
Contact VARCHAR(15),
REGID INT NULL,
BloodID INT NULL,
QuantityDonated INT CHECK (QuantityDonated >= 0),
FOREIGN KEY (BloodID) REFERENCES Blood(BloodID) ON DELETE SET NULL
);
```

```
CREATE TABLE RegistrationTeam (
    RegistrationID INT PRIMARY KEY AUTO_INCREMENT,
    DonorID INT,
    PatientID INT,
    RegistrationDate DATE,
    FOREIGN KEY (DonorID) REFERENCES Donor(DonorID) ON DELETE CASCADE,
    FOREIGN KEY (PatientID) REFERENCES Patient(PatientID) ON DELETE CASCADE
);
```

```
CREATE TABLE Organ (
    OrganID INT PRIMARY KEY AUTO_INCREMENT,
    OrganType VARCHAR(50) NOT NULL,
    DonorID INT,
    PatientID INT,
    StorageLocation VARCHAR(100),
    Status ENUM('Available', 'Transplanted', 'Expired'),
```

```
TissueType VARCHAR(50) NOT NULL,  
FOREIGN KEY (DonorID) REFERENCES Donor(DonorID),  
FOREIGN KEY (PatientID) REFERENCES Patient(PatientID)  
);
```

```
CREATE TABLE OrganStorage (  
    StorageID INT PRIMARY KEY AUTO_INCREMENT,  
    OrganID INT,  
    HospitalID INT,  
    Quantity INT CHECK (Quantity >= 0),  
    FOREIGN KEY (OrganID) REFERENCES Organ(OrganID),  
    FOREIGN KEY (HospitalID) REFERENCES Hospital(HospitalID)  
);
```

```
CREATE TABLE Donation (  
    DonationID INT PRIMARY KEY AUTO_INCREMENT,  
    DonorID INT,  
    OrganID INT,  
    BloodID INT,  
    DonationDate DATE NOT NULL,  
    FOREIGN KEY (DonorID) REFERENCES Donor(DonorID),  
    FOREIGN KEY (OrganID) REFERENCES Organ(OrganID),  
    FOREIGN KEY (BloodID) REFERENCES Blood(BloodID)  
);
```

```
CREATE TABLE OrganTransplantCentre (  
    TransplantID INT PRIMARY KEY AUTO_INCREMENT,  
    PatientID INT,  
    OrganID INT,
```

```
HospitalID INT,  
TransplantDate DATE NOT NULL,  
Status ENUM('Successful', 'Failed', 'Pending'),  
TissueType VARCHAR(50) NOT NULL,  
Location VARCHAR(100) NOT NULL,  
Name VARCHAR(100) NOT NULL,  
Organs VARCHAR(100) NOT NULL,  
Quantity INT CHECK (Quantity >= 0),  
CauseOfDonation TEXT,  
FOREIGN KEY (PatientID) REFERENCES Patient(PatientID),  
FOREIGN KEY (OrganID) REFERENCES Organ(OrganID),  
FOREIGN KEY (HospitalID) REFERENCES Hospital(HospitalID)  
);
```