MY SQL CODES

CREATE TABLE Person (

PersonID INT AUTO\_INCREMENT PRIMARY KEY,

Name VARCHAR(100) NOT NULL,

Gender ENUM('Male', 'Female', 'Other') NOT NULL,

DateOfBirth DATE NOT NULL,

NRC VARCHAR(15) NOT NULL UNIQUE,

Address VARCHAR(150),

Phone VARCHAR(15) UNIQUE,

VoterID INT UNIQUE,

CONSTRAINT fk\_person\_voter FOREIGN KEY (VoterID) REFERENCES Voter(VoterID)

);

CREATE TABLE Voter (

VoterID INT AUTO\_INCREMENT PRIMARY KEY,

Location VARCHAR(100) NOT NULL,

Gender ENUM('Male', 'Female', 'Other') NOT NULL,

ConstituencyID INT NOT NULL,

PersonID INT UNIQUE,

CONSTRAINT fk\_voter\_person FOREIGN KEY (PersonID) REFERENCES Person(PersonID),

CONSTRAINT fk\_voter\_constituency FOREIGN KEY (ConstituencyID) REFERENCES Constituency(ConstituencyID)

);

CREATE TABLE Vote (

VoteID INT AUTO\_INCREMENT PRIMARY KEY,

BallotID INT NOT NULL,

VoterID INT NOT NULL,

CandidateID INT NOT NULL,

CONSTRAINT fk\_vote\_ballot FOREIGN KEY (BallotID) REFERENCES Ballot(BallotID),

CONSTRAINT fk\_vote\_voter FOREIGN KEY (VoterID) REFERENCES Voter(VoterID),

CONSTRAINT fk\_vote\_candidate FOREIGN KEY (CandidateID) REFERENCES Candidate(CandidateID)

);

CREATE TABLE Ballot (

BallotID INT AUTO\_INCREMENT PRIMARY KEY,

PositionID INT NOT NULL,

PoliticalPartyID INT NOT NULL,

VoterID INT NOT NULL,

CONSTRAINT fk\_ballot\_position FOREIGN KEY (PositionID) REFERENCES Position(PositionID),

CONSTRAINT fk\_ballot\_party FOREIGN KEY (PoliticalPartyID) REFERENCES PoliticalParty(PartyID),

CONSTRAINT fk\_ballot\_voter FOREIGN KEY (VoterID) REFERENCES Voter(VoterID)

);

CREATE TABLE Candidate (

CandidateID INT AUTO\_INCREMENT PRIMARY KEY,

Name VARCHAR(100) NOT NULL,

Age INT CHECK (Age >= 18),

Gender ENUM('Male', 'Female', 'Other') NOT NULL,

PartyID INT NOT NULL,

PersonID INT UNIQUE,

CONSTRAINT fk\_candidate\_party FOREIGN KEY (PartyID) REFERENCES PoliticalParty(PartyID),

CONSTRAINT fk\_candidate\_person FOREIGN KEY (PersonID) REFERENCES Person(PersonID)

);

CREATE TABLE PoliticalParty (

PartyID INT AUTO\_INCREMENT PRIMARY KEY,

Symbol VARCHAR(10) UNIQUE,

Name VARCHAR(80) UNIQUE

);

CREATE TABLE District (

DistrictID INT AUTO\_INCREMENT PRIMARY KEY,

Name VARCHAR(100) NOT NULL,

VoterID INT,

CONSTRAINT fk\_district\_voter FOREIGN KEY (VoterID) REFERENCES Voter(VoterID)

);

CREATE TABLE Constituency (

ConstituencyID INT AUTO\_INCREMENT PRIMARY KEY,

Name VARCHAR(100) NOT NULL,

DistrictID INT NOT NULL,

CONSTRAINT fk\_constituency\_district FOREIGN KEY (DistrictID) REFERENCES District(DistrictID)

);

CREATE TABLE Ward (

WardID INT AUTO\_INCREMENT PRIMARY KEY,

Name VARCHAR(100) NOT NULL,

ConstituencyID INT NOT NULL,

CONSTRAINT fk\_ward\_constituency FOREIGN KEY (ConstituencyID) REFERENCES Constituency(ConstituencyID)

);

CREATE TABLE Position (

PositionID INT AUTO\_INCREMENT PRIMARY KEY,

Name VARCHAR(50) NOT NULL,

ConstituencyID INT,

CONSTRAINT fk\_position\_constituency FOREIGN KEY (ConstituencyID) REFERENCES Constituency(ConstituencyID)

);

CREATE TABLE PollingCentre (

CentreID INT AUTO\_INCREMENT PRIMARY KEY,

Name VARCHAR(100) NOT NULL,

NumberOfStations INT NOT NULL,

Location VARCHAR(100),

ConstituencyID INT NOT NULL,

CONSTRAINT fk\_polling\_constituency FOREIGN KEY (ConstituencyID) REFERENCES Constituency(ConstituencyID)

);