CREATE TABLE Network\_Types (

network\_type\_id INT PRIMARY KEY,

network\_type\_name VARCHAR(255) NOT NULL -- HT or LT

);

CREATE TABLE Asset\_Types (

asset\_type\_id INT PRIMARY KEY,

network\_type\_id INT NOT NULL, -- HT or LT

asset\_name VARCHAR(255) NOT NULL, -- DTR, Conductor, Pole, PTR etc

FOREIGN KEY (network\_type\_id) REFERENCES Network\_Types(network\_type\_id)

);

CREATE TABLE Problems (

problem\_id INT PRIMARY KEY -- 101, 305

asset\_type\_id INT NOT NULL, -- Conductor , Pole

network\_type\_id INT NOT NULL, -- LT, HT

description VARCHAR(255) NOT NULL, -- Inadequate Spacers, HT Pole tilted

FOREIGN KEY (asset\_type\_id) REFERENCES Asset\_Types(asset\_type\_id),

FOREIGN KEY (network\_type\_id) REFERENCES Network\_Types(network\_type\_id)

);

CREATE TABLE Solutions (

solution\_id SERIAL PRIMARY KEY,

problem\_id INT NOT NULL, -- 101, 305

solution\_description TEXT NOT NULL, -- Spacers Installed, Pole straighten

FOREIGN KEY (problem\_id) REFERENCES Problems(problem\_id)

);

CREATE TABLE Offices (

office\_code INT PRIMARY KEY, --3332103

office\_name VARCHAR(255) NOT NULL, -- Chakdaha West CCC

office\_type VARCHAR(50) NOT NULL CHECK (office\_type IN ('CCC', 'Division', 'Region', 'Zone', 'VB\_Cell'))

);

CREATE TABLE Users (

erp\_id INT PRIMARY KEY, -- 90012345

emp\_name VARCHAR(255) NOT NULL, -- Amit Das

designation VARCHAR(255) NOT NULL, -- AE(E)

office\_code INT NOT NULL,

FOREIGN KEY (office\_code) REFERENCES Offices(office\_code)

);

CREATE TABLE Login (

user\_id INT PRIMARY KEY NOT NULL,

username VARCHAR(255) UNIQUE NOT NULL,

password\_hash VARCHAR(255) NOT NULL,

last\_login TIMESTAMP,

FOREIGN KEY (user\_id) REFERENCES Users(erp\_id)

);

CREATE TABLE OTP (

otp\_id SERIAL PRIMARY KEY,

user\_id INT NOT NULL,

otp\_code VARCHAR(6) NOT NULL,

created\_at TIMESTAMP NOT NULL DEFAULT CURRENT\_TIMESTAMP,

expires\_at TIMESTAMP NOT NULL,

used BOOLEAN DEFAULT FALSE,

FOREIGN KEY (user\_id) REFERENCES Users(erp\_id)

);

CREATE TABLE Role\_Assignment (

inspection\_id SERIAL PRIMARY KEY, -- auto generated i.e. 312

assigned\_by\_erp\_id INT NOT NULL, -- DM i.e. 90009977

assigned\_on DATE NOT NULL DEFAULT CURRENT\_DATE,

inspection\_from\_date DATE NOT NULL, -- 01.09.2024

inspection\_to\_date DATE NOT NULL, --04.09.2024

office\_code\_to\_inspect VARCHAR(255) NOT NULL, --3332103

location VARCHAR(255),

FOREIGN KEY (assigned\_by\_erp\_id) REFERENCES Users(erp\_id)

);

CREATE TABLE Inspection\_Team (

inspection\_team\_id SERIAL PRIMARY KEY, --- 31201, 31202

inspection\_id INT NOT NULL, -- 312

user\_id INT NOT NULL, -- 90012345, 90012645

is\_team\_leader BOOLEAN NOT NULL DEFAULT FALSE, -- True, False

FOREIGN KEY (inspection\_id) REFERENCES Role\_Assignment(inspection\_id),

FOREIGN KEY (user\_id) REFERENCES Users(erp\_id)

);

----------------------------------------------------------------------------------------------------------------------------------

CREATE TABLE Vulnerabilities (

vulnerability\_id SERIAL PRIMARY KEY, -- auto generated 987, 988

inspection\_id INT NOT NULL, -- 312

problem\_id INT NOT NULL, --101, 305 i.e. Inadequate Spacers, HT Pole tilted

specific\_remarks TEXT, -- “In front of school”, “Water logged paddy field”

description TEXT, -- Additional detailed descriptions – not mandatory

status\_timestamp TIMESTAMP DEFAULT CURRENT\_TIMESTAMP, -- Tracks status changes

latitude DECIMAL(9,6),

longitude DECIMAL(9,6),

gis\_id VARCHAR(255),

images TEXT NOT NULL, -- Assuming URLs or identifiers for images

assigned\_office\_code INT NOT NULL, -- to be entered by user . for LT, CCC and for HT, Division

allotment\_status VARCHAR(50) NOT NULL CHECK (allotment\_status IN ('assigned', 'in progress', 'resolved')), -- default is ‘assigned’

FOREIGN KEY (inspection\_id) REFERENCES Role\_Assignment(inspection\_id) ON DELETE CASCADE,

FOREIGN KEY (problem\_id) REFERENCES Problems(problem\_id) ON DELETE CASCADE,

FOREIGN KEY (assigned\_office\_code) REFERENCES Offices(office\_code) -- Linking to the Offices table

);

CREATE TABLE Rectification (

rectification\_id SERIAL PRIMARY KEY,

vulnerability\_id INT NOT NULL, -- action taken iro 987, no row for v\_id 988

solution\_id INT, -- 1022

rectification\_date DATE NOT NULL,

rectification\_status VARCHAR(255) NOT NULL CHECK (rectification\_status IN ('assigned', 'in progress', 'completed')), -- completed

rectification\_type VARCHAR(255) NOT NULL -- if rectification can be choose from drop down ,

rectified\_by VARCHAR(255) NOT NULL, -- vendor id or erp id

rectification\_remarks TEXT, -- detailed remarks

images TEXT NOT NULL,

latitude DECIMAL(9,6),

longitude DECIMAL(9,6),

FOREIGN KEY (vulnerability\_id) REFERENCES Vulnerabilities(vulnerability\_id),

FOREIGN KEY (solution\_id) REFERENCES Solutions(solution\_id) -- Linking to the Solutions table

);