**SQL SCRIPT USED FOR THE SDG CLEAN\_ENERGY PROJECT**

-- Select the clean\_energy database

USE clean\_energy;

-- Create the SolarPanels table

CREATE TABLE SolarPanels (

PanelID INT PRIMARY KEY,

PanelType VARCHAR(50),

Efficiency DECIMAL(5,2)

);

-- Create the DistributionCenters table

CREATE TABLE DistributionCenters (

CenterID INT PRIMARY KEY,

CenterName VARCHAR(100),

Location VARCHAR(100)

);

-- Create the RuralAreas table

CREATE TABLE RuralAreas (

AreaID INT PRIMARY KEY,

AreaName VARCHAR(100),

Population INT

);

-- Create the Installations table

CREATE TABLE Installations (

InstallationID INT PRIMARY KEY,

PanelID INT,

CenterID INT,

AreaID INT,

InstallationDate DATE,

FOREIGN KEY (PanelID) REFERENCES SolarPanels(PanelID),

FOREIGN KEY (CenterID) REFERENCES DistributionCenters(CenterID),

FOREIGN KEY (AreaID) REFERENCES RuralAreas(AreaID)

);

-- Insert data into the SolarPanels table

INSERT INTO SolarPanels (PanelID, PanelType, Efficiency)

VALUES (1, 'Mono-crystalline', 19.5);

-- Insert data into the DistributionCenters table

INSERT INTO DistributionCenters (CenterID, CenterName, Location)

VALUES (1, 'GreenEnergy Hub', 'CityA');

-- Insert data into the RuralAreas table

INSERT INTO RuralAreas (AreaID, AreaName, Population)

VALUES (1, 'VillageX', 5000);

-- Insert data into the Installations table

INSERT INTO Installations (InstallationID, PanelID, CenterID, AreaID, InstallationDate)

VALUES (1, 1, 1, 1, '2024-08-01');