**PART 3: SQL SCRIPTS**

CREATE DATABASE IF NOT EXISTS SDG;

USE SDG;

CREATE TABLE Households (

household\_id INT PRIMARY KEY,

location VARCHAR(100),

avg\_energy\_consumption DECIMAL(10, 2)

);

CREATE TABLE EnergySources (

source\_id INT PRIMARY KEY,

source\_type VARCHAR(50),

efficiency\_rating DECIMAL(5, 2)

);

CREATE TABLE ConsumptionRecords (

record\_id INT PRIMARY KEY,

household\_id INT,

source\_id INT,

energy\_used DECIMAL(10, 2),

consumption\_date DATE,

FOREIGN KEY (household\_id) REFERENCES Households(household\_id),

FOREIGN KEY (source\_id) REFERENCES EnergySources(source\_id)

);

INSERT INTO Households (household\_id, location, avg\_energy\_consumption) VALUES

(1, 'New York', 300.50),

(2, 'Los Angeles', 250.75),

(3, 'Chicago', 220.30),

(4, 'Cape Town', 300.75),

(5, 'Sydney', 200.90),

(6, 'Durban', 234.40);

INSERT INTO EnergySources (source\_id, source\_type, efficiency\_rating) VALUES

(1, 'Solar', 0.85),

(2, 'Wind', 0.90),

(3, 'Oil', 0.70),

(4, 'Hydropower', 0.66),

(5, 'Geothermal', 0.78),

(6, 'Coal', 0.98);

INSERT INTO ConsumptionRecords (record\_id, household\_id, source\_id, energy\_used, consumption\_date) VALUES

(1, 1, 1, 150.50, '2023-08-01'),

(2, 2, 2, 100.00, '2023-08-02'),

(3, 3, 3, 120.75, '2023-08-03'),

(4, 4, 4, 189.00, '2023-08-04'),

(5, 5, 5, 139.21, '2023-08-05'),

(6, 6, 6, 160.68, '2023-08-06');