create database huella\_Carbono;

use huella\_Carbono;

CREATE TABLE `huella\_carbono`.`ciudad` (

`codigo` VARCHAR(30) NOT NULL,

`nombre` VARCHAR(20) NOT NULL,

`emisionPromedio` DOUBLE NOT NULL, check (emisionPromedio>0),

`pais` VARCHAR(20) NOT NULL,

`poblacion` INT NOT NULL, check (poblacion>0),

`area` DOUBLE NOT NULL, check (area>0),

PRIMARY KEY (`codigo`));

CREATE TABLE `huella\_carbono`.`usuario` (

`codigo` VARCHAR(30) NOT NULL,

`nombre` VARCHAR(20) NOT NULL,

`apellido` VARCHAR(20) NOT NULL,

`fecha\_nacimiento` DATE NOT NULL,

`profesion` VARCHAR(20) NULL,

`contrasena` VARCHAR(20) NOT NULL,

`correo` VARCHAR(20) NOT NULL,

`cod\_ciudad` VARCHAR(30) NOT NULL,

PRIMARY KEY (`codigo`),

INDEX `cod\_ciudad\_idx` (`cod\_ciudad` ASC),

CONSTRAINT `cod\_ciudad`

FOREIGN KEY (`cod\_ciudad`)

REFERENCES `huella\_carbono`.`ciudad` (`codigo`)

ON DELETE NO ACTION

ON UPDATE NO ACTION);

CREATE TABLE `huella\_carbono`.`transporte` (

`codigo` VARCHAR(30) NOT NULL,

`nombreGenerico` VARCHAR(20) NOT NULL,

`nombreReal` VARCHAR(20) NULL,

`co2Km` DOUBLE NOT NULL,

`marca` VARCHAR(20) NULL,

`combustible` VARCHAR(20) NOT NULL,

`descripcion` VARCHAR(100) NULL,

`cilindraje` DOUBLE NOT NULL,check (cilindraje>0),

`modelo` INT NOT NULL,check (modelo>1900),

PRIMARY KEY (`codigo`))

;

CREATE TABLE `huella\_carbono`.`viaje` (

`cod\_viaje` INT NOT NULL AUTO\_INCREMENT,

`cod\_usuario` VARCHAR(30) NOT NULL,

`cod\_transporte` VARCHAR(30) NOT NULL,

`fecha` DATE NOT NULL,

`kilometros` DOUBLE NOT NULL,

`totalCo` DOUBLE NOT NULL,

PRIMARY KEY (`cod\_viaje`, `cod\_usuario`),

FOREIGN KEY (`cod\_usuario`)

REFERENCES `huella\_carbono`.`usuario` (`codigo`),

FOREIGN KEY (`cod\_transporte`)

REFERENCES `huella\_carbono`.`transporte` (`codigo`));

CREATE TABLE `huella\_carbono`.`electrodomestico` (

`codigo` VARCHAR(30) NOT NULL,

`nombreGenerico` VARCHAR(20) NOT NULL,

`nombreReal` VARCHAR(20) NOT NULL,

`watts` DOUBLE NOT NULL,

`marca` VARCHAR(20) NULL,

`descripcion` VARCHAR(100) NULL,

`Co2` DOUBLE NOT NULL,

PRIMARY KEY (`codigo`));

CREATE TABLE `huella\_carbono`.`consumo` (

`cod\_consumo` INT NOT NULL AUTO\_INCREMENT,

`cod\_usuario` VARCHAR(30) NOT NULL,

`cod\_electro` VARCHAR(30) NOT NULL,

`fecha` DATE NOT NULL,

`horasdeUso` INT NOT NULL,

`totalCo` DOUBLE NULL,

PRIMARY KEY (`cod\_consumo`,`cod\_usuario`),

INDEX `cod\_electro\_idx` (`cod\_electro` ASC),

CONSTRAINT `cod\_usuario`

FOREIGN KEY (`cod\_usuario`)

REFERENCES `huella\_carbono`.`usuario` (`codigo`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `cod\_electro`

FOREIGN KEY (`cod\_electro`)

REFERENCES `huella\_carbono`.`electrodomestico` (`codigo`)

ON DELETE NO ACTION

ON UPDATE NO ACTION);

CREATE TABLE `huella\_carbono`.`propuesta` (

`num` INT NOT NULL AUTO\_INCREMENT,

`cod\_usuario` VARCHAR(30) NOT NULL ,

`tipo` VARCHAR(20) NOT NULL,

`co2` VARCHAR(20) NOT NULL,

`nombreEs` VARCHAR(20) NOT NULL,

`nombrelg` VARCHAR(20) NOT NULL,

`descripcion` VARCHAR(50) NOT NULL,

`fuente` VARCHAR(20) NOT NULL,

PRIMARY KEY (`num`,`cod\_usuario`),

FOREIGN KEY (`cod\_usuario`)

REFERENCES `huella\_carbono`.`usuario` (`codigo`)

);

CREATE TABLE `huella\_carbono`.`recomendacion` (

`num` INT NOT NULL auto\_increment,

`descripcion` VARCHAR(20) NOT NULL,

`reduccion` DOUBLE NOT NULL,

PRIMARY KEY (`num`));

CREATE TABLE `huella\_carbono`.`asignacion` (

`num\_recomendacion` INT NOT NULL auto\_increment,

`cod\_usuario` VARCHAR(20) NOT NULL,

`estado` DOUBLE NOT NULL,

`fecha` DATE NOT NULL,

PRIMARY KEY (`num\_recomendacion`,`cod\_usuario`),

FOREIGN KEY (`num\_recomendacion`)

REFERENCES `huella\_carbono`.`recomendacion` (`num`),

FOREIGN KEY (`cod\_usuario`)

REFERENCES `huella\_carbono`.`usuario` (`codigo`)

);