Write sql queries to create tables in the database with these entities

public class User

{

public int Id { get; set; }

public string Login { get; set; }

public string Password { get; set; }

public string? Name { get; set; }

public double? Weight { get; set; }

public double? Height { get; set; }

public int? Age { get; set; }

public string? Sex { get; set; }

public List<FoodIntake>? FoodIntakes { get; set; } = new();

public List<WeightDiary>? WeightDiaries { get; set; } = new();

public int? PhysicalActivityId { get; set; }

public PhysicalActivity? PhysicalActivity { get; set; }

}

public class WeightDiary

{

public int Id { get; set; }

public DateOnly Date { get; set; }

public double CurrentWeight { get; set; }

public int? UserId { get; set; }

public User? User { get; set; }

}

public class ProductCategory

{

public int Id { get; set; }

public string Name { get; set; }

public string Description { get; set; }

public List<Product> Products { get; set; }

}

public class Product

{

public int Id { get; set; }

public string? Name { get; set; }

public int Calories { get; set; }

public int? ProductCategoryId { get; set; }

public ProductCategory? ProductCategory { get; set; }

public List<Ingredient>? Ingredients { get; set; } = new();

}

public class PhysicalActivity

{

public int Id { get; set; }

public string Description { get; set; }

public double Ratio { get; set; }

public List<User> Users { get; set; }

}

public class MealCategory

{

public int Id { get; set; }

public string Name { get; set; }

public string Description { get; set; }

public List<Meal> Meals { get; set; }

}

public class Meal

{

public int Id { get; set; }

public string? Name { get; set; }

public int? MealCategoryId { get; set; }

public MealCategory? MealCategory { get; set; }

public List<Ingredient> Ingredients { get; set; } = new ();

public List<FoodIntake> FoodIntakes { get; set; } = new ();

public int TotalCalories { get; set; } = 0;

public Meal()

{

foreach(var item in Ingredients)

{

TotalCalories+= item.TotalCalories;

}

}

}

public class Ingredient

{

public int Id { get; set; }

public int ProductQuantity { get; set; }

public string? Description { get; set; }

public int? ProductId { get; set; } // внешний ключ

public Product? Product { get; set; } // навигационное свойство

public List<Meal> Meals { get; set; } = new();

public int TotalCalories => Product.Calories \* ProductQuantity;

}

public class FoodIntakeType

{

public int Id { get; set; }

public string Name { get; set; }

public string Description { get; set; }

public List<FoodIntake> FoodIntakes { get; set; } = new List<FoodIntake>();

}

public class FoodIntake

{

public int Id { get; set; }

public int? FoodIntakeTypeId { get; set; }

public FoodIntakeType? FoodIntakeType { get; set; }

public DateTime? Date { get; set; }

public List<Meal> Meals { get; set; } = new();

public string? UserId { get; set; }

public User? User { get; set; }

public int TotalCalories { get; set; } = 0;

public FoodIntake()

{

foreach (var item in Meals)

{

TotalCalories += item.TotalCalories;

}

}

}

}

CREATE TABLE Users (

Id INT PRIMARY KEY,

Login VARCHAR(255) NOT NULL,

Password VARCHAR(255) NOT NULL,

Name VARCHAR(255),

Weight FLOAT,

Height FLOAT,

Age INT,

Sex VARCHAR(255),

PhysicalActivityId INT,

CONSTRAINT fk\_users\_physical\_activity FOREIGN KEY (PhysicalActivityId) REFERENCES PhysicalActivities(Id)

);

CREATE TABLE WeightDiaries (

Id INT PRIMARY KEY,

Date DATE NOT NULL,

CurrentWeight FLOAT NOT NULL,

UserId INT NOT NULL,

CONSTRAINT fk\_weight\_diaries\_user FOREIGN KEY (UserId) REFERENCES Users(Id)

);

CREATE TABLE PhysicalActivities (

Id INT PRIMARY KEY,

Description VARCHAR(255) NOT NULL,

Ratio FLOAT NOT NULL

);

CREATE TABLE ProductCategories (

Id INT PRIMARY KEY,

Name VARCHAR(255) NOT NULL,

Description VARCHAR(255) NOT NULL

);

CREATE TABLE Products (

Id INT PRIMARY KEY,

Name VARCHAR(255),

Calories INT NOT NULL,

ProductCategoryId INT NOT NULL,

CONSTRAINT fk\_products\_product\_category FOREIGN KEY (ProductCategoryId) REFERENCES ProductCategories(Id)

);

CREATE TABLE Ingredients (

Id INT PRIMARY KEY,

ProductQuantity INT NOT NULL,

Description VARCHAR(255),

ProductId INT NOT NULL,

CONSTRAINT fk\_ingredients\_product FOREIGN KEY (ProductId) REFERENCES Products(Id)

);

CREATE TABLE MealCategories (

Id INT PRIMARY KEY,

Name VARCHAR(255) NOT NULL,

Description VARCHAR(255) NOT NULL

);

CREATE TABLE Meals (

Id INT PRIMARY KEY,

Name VARCHAR(255),

MealCategoryId INT NOT NULL,

CONSTRAINT fk\_meals\_meal\_category FOREIGN KEY (MealCategoryId) REFERENCES MealCategories(Id)

);

CREATE TABLE MealIngredients (

MealId INT NOT NULL,

IngredientId INT NOT NULL,

PRIMARY KEY (MealId, IngredientId),

CONSTRAINT fk\_meal\_ingredients\_meal FOREIGN KEY (MealId) REFERENCES Meals(Id),

CONSTRAINT fk\_meal\_ingredients\_ingredient FOREIGN KEY (IngredientId) REFERENCES Ingredients(Id)

);

CREATE TABLE FoodIntakeTypes (

Id INT PRIMARY KEY,

Name VARCHAR(255) NOT NULL,

Description VARCHAR(255) NOT NULL

);

CREATE TABLE FoodIntakes (

Id INT PRIMARY KEY,

FoodIntakeTypeId INT NOT NULL,

Date DATETIME,

UserId INT NOT NULL,

CONSTRAINT fk\_food\_intakes\_food\_intake\_type FOREIGN KEY (FoodIntakeTypeId) REFERENCES FoodIntakeTypes(Id),

CONSTRAINT fk\_food\_intakes\_user FOREIGN KEY (UserId) REFERENCES Users(Id)

);

CREATE TABLE MealFoodIntakes (

MealId INT NOT NULL,

FoodIntakeId INT NOT NULL,

PRIMARY KEY (MealId, FoodIntakeId),

CONSTRAINT fk\_meal\_food\_intakes\_meal FOREIGN KEY (MealId) REFERENCES Meals(Id),

CONSTRAINT fk\_meal\_food\_intakes\_food\_intake FOREIGN KEY (FoodIntakeId) REFERENCES FoodIntakes(Id)

);