Problem 1.

CREATE DATABASE Minions

Problem 2.

CREATE TABLE Minions(

Id INT PRIMARY KEY IDENTITY,

[Name] NVARCHAR (50),

Age INT

)

CREATE TABLE TOWN(

Id INT PRIMARY KEY IDENTITY,

[Name] NVARCHAR (50),

)

Problem 3.

ALTER TABLE Minions

ADD TownId INT FOREIGN KEY REFERENCEs TOWN(Id)

Problem 4.

**INSERT** **INTO** Towns (Id,Name) **VALUES** ('1','Sofia'),('2','Plovdiv'),('3','Varna'); **INSERT** **INTO** Minions (Id,Name,Age,TownId) **VALUES**('1','Kevin','22','1'),('2', 'Bob','15','3'),('3', 'Steward',**NULL**,'2');

Problem 5.

TURNICATE TABLE Minions

Problem 6.

DROP TABLE Minions

DROP TABLE Towns

Problem 7.

CREATE TABLE People(

Id BigINT PRIMARY KEY IDENTITY,

[Name] VARCHAR(200) NOT NULL,

Picture VARBINARY(MAX),

Hight DECIMAL(15,1),

[Weight] DECIMAL,

Gender VARCHAR(1) NOT NULL,

BirhDate DATETIME NOT NULL,

Biography NTEXT,

)

INSERT INTO People([Name],Picture,Hight,[Weight],Gender,BirhDate,Biography)

VALUES

('Ivan',NULL,1.56,1.43,'m',CONVERT(datetime,'11-10-2018',103),NULL),

('Stoyan',NULL,1.56,1.43,'f',CONVERT(datetime,'11-10-2018',103),NULL),

('Damqn',NULL,1.56,1.43,'f',CONVERT(datetime,'11-10-2018',103),NULL),

('Baraban',NULL,1.56,1.43,'f',CONVERT(datetime,'11-10-2018',103),NULL),

('Stamy',NULL,1.56,1.43,'m',CONVERT(datetime,'11-10-2018',103),NULL)

Problem 8.

CREATE TABLE Users(

Id BigINT PRIMARY KEY IDENTITY,

UserName VARCHAR(30) NOT NULL UNIQUE,

[Password] VARCHAR (26) NOT NULL,

ProfilePicture VARBINARY(MAX),

LastLoginTime DATETIME,

isDeleted BIT,

)

INSERT INTO Users (UserName,[Password],ProfilePicture,LastLoginTime,isDeleted)

VALUES

('Stamat','123',NULL,CONVERT(datetime,'22-05-2018',103),0),

('Ivan','1223',NULL,CONVERT(datetime,'23-05-2018',103),1),

('Todor','321',NULL,CONVERT(datetime,'22-05-2018',103),0),

('Kokoshka','12332',NULL,CONVERT(datetime,'21-05-2018',103),0),

('Krasnodarka','132323',NULL,CONVERT(datetime,'22-05-2018',103),1)

Problem 9

ALTER TABLE Users

DROP CONSTRAINT PK\_\_Users\_\_3214EC0795902651

ALTER TABLE USERS

ADD CONSTRAINT PK\_USERS PRIMARY KEY (Id,UserName)

Problem 11

ALTER TABLE USERS

ADD DEFAULT GETDATE() FOR LastLoginTime,

Problem 12

ALTER TABLE USERS

ADD CONSTRAINT CHK\_USERS CHECK (LEN(UserName)>=3)

Problem 13

CREATE TABLE Dircetors(

Id INT PRIMARY KEY IDENTITY,

DirectorName VARCHAR(50) NOT NULL,

Notes NTEXT,

)

CREATE TABLE Ganres(

Id INT PRIMARY KEY IDENTITY,

GanreName VARCHAR(50) NOT NULL,

Notes NTEXT,

)

CREATE TABLE Categories(

Id INT PRIMARY KEY IDENTITY,

CategoryName VARCHAR(50) NOT NULL,

Notes NTEXT,

)

CREATE TABLE Movies(

Id INT PRIMARY KEY IDENTITY,

Title VARCHAR(50) NOT NULL,

DirectorId INT FOREIGN KEY REFERENCES Dircetors(Id) NOT NULL,

CopyrightYear INT,

[Length] INT ,

CategoryId INT FOREIGN KEY REFERENCES Categories(Id) NOT NULL,

Notes NTEXT,

)

INSERT INTO Movies(Title,DirectorId,CategoryId)

VALUES

('SAW',1,1),

('KARIBSKI PIRATI',2,2),

('Jenini s DEca',3,1),

('Voina na SVetoveto',5,1),

('Koi shte kara vlaka',4,3)

INSERT INTO Dircetors(DirectorName)

VALUES

('Ivan'),

('Dragan'),

('Pesho'),

('Stamat'),

('Kiril')

INSERT INTO Ganres(GanreName)

VALUES

('komediq'),

('horor'),

('romantika'),

('fantastika'),

('psixo')

INSERT INTO Categories(CategoryName)

VALUES

('serial'),

('film'),

('semeen'),

('zabaven'),

('trivialno')

Problem 14

|  |
| --- |
|  |
| CREATE TABLE Categories ( |
|  | Id INT PRIMARY KEY IDENTITY NOT NULL, |
|  | CategoryName NVARCHAR(50), |
|  | DailyRate DECIMAL(5, 2) NOT NULL, |
|  | WeeklyRate DECIMAL(5, 2) NOT NULL, |
|  | MonthlyRate DECIMAL(5, 2) NOT NULL, |
|  | WeekendRate DECIMAL(5, 2) NOT NULL |
|  | ) |
|  | INSERT INTO Categories (CategoryName, DailyRate, WeeklyRate, MonthlyRate, WeekendRate) VALUES |
|  | ('monster trucks', 5.21, 23.5, 125.5, 45.5) |
|  |  |
|  | INSERT INTO Categories (CategoryName, DailyRate, WeeklyRate, MonthlyRate, WeekendRate) VALUES |
|  | ('tesla cars', 51.21, 123.5, 225.5, 435.5) |
|  |  |
|  | INSERT INTO Categories (CategoryName, DailyRate, WeeklyRate, MonthlyRate, WeekendRate) VALUES |
|  | ('opel astrak', 0.21, 3.5, 5.5, 1.5) |
|  |  |
|  | CREATE TABLE Cars ( |
|  | Id INT PRIMARY KEY IDENTITY NOT NULL, |
|  | PlateNumber VARCHAR(8), |
|  | Manufacturer VARCHAR(30), |
|  | Model VARCHAR(30), |
|  | CarYear DATE, |
|  | CategoryId INT FOREIGN KEY REFERENCES Categories(Id), |
|  | Doors REAL, |
|  | Picture VARBINARY(MAX), |
|  | Condition NVARCHAR(100), |
|  | Available BIT |
|  | ) |
|  |  |
|  | INSERT INTO Cars (PlateNumber, Manufacturer, Model, CarYear, CategoryId, Doors, Condition, Available) VALUES |
|  | ('B 0525 A', 'Opel', 'Astra', '1994', 3, 4, 'BRAND NEW WITH RUST', 1) |
|  |  |
|  | INSERT INTO Cars (PlateNumber, Manufacturer, Model, CarYear, CategoryId, Doors, Condition, Available) VALUES |
|  | ('A 2241 X', 'Opel', 'Cadet', '1990', 1, 2, 'BRAND NEW WITH RUST', 1) |
|  |  |
|  | INSERT INTO Cars (PlateNumber, Manufacturer, Model, CarYear, CategoryId, Doors, Condition, Available) VALUES |
|  | ('X 4452 A', 'Opel', 'Vectra', '1997', 3, 4, 'BRAND NEW WITH RUST', 2) |
|  |  |
|  | CREATE TABLE Employees ( |
|  | Id INT PRIMARY KEY IDENTITY NOT NULL, |
|  | FirstName NVARCHAR(50) NOT NULL, |
|  | LastName NVARCHAR(50) NOT NULL, |
|  | Title NVARCHAR(30), |
|  | Notes NVARCHAR(MAX) |
|  | ) |
|  |  |
|  | INSERT INTO Employees (FirstName, LastName) VALUES |
|  | ('Dancho', 'Lechkov'), |
|  | ('Hristo', 'Stoichkov'), |
|  | ('Emil', 'Kremenliev') |
|  |  |
|  | CREATE TABLE Customers ( |
|  | Id INT PRIMARY KEY IDENTITY NOT NULL, |
|  | DriverLicenceNumber NVARCHAR(15) NOT NULL, |
|  | FullName NVARCHAR(100) NOT NULL, |
|  | Address NVARCHAR(500), |
|  | City NVARCHAR(50), |
|  | ZIPCode NVARCHAR(10), |
|  | Notes NVARCHAR(200) |
|  | ) |
|  |  |
|  | INSERT INTO Customers (DriverLicenceNumber, FullName) VALUES |
|  | ('Bql', 'Georgi Ivanov'), |
|  | ('Zelen', 'Petur Hubchev'), |
|  | ('Cherven', 'Dimitur Penev') |
|  |  |
|  | CREATE TABLE RentalOrders ( |
|  | Id INT PRIMARY KEY IDENTITY NOT NULL, |
|  | EmployeeId INT FOREIGN KEY REFERENCES Employees(Id), |
|  | CustomerId INT FOREIGN KEY REFERENCES Customers(Id), |
|  | CarId INT, |
|  | TankLevel INT, |
|  | KilometrageStart INT, |
|  | KilometrageEnd INT, |
|  | TotalKilometrage INT, |
|  | StartDate DATE, |
|  | EndDate DATE, |
|  | TotalDays AS DATEDIFF(DAY, StartDate, EndDate), |
|  | RateApplied INT, |
|  | TaxRate DECIMAL(5, 2), |
|  | OrderStatus NVARCHAR(50), |
|  | Notes NVARCHAR(MAX) |
|  | ) |
|  |  |
|  | INSERT INTO RentalOrders (EmployeeId, CustomerId, StartDate, EndDate) VALUES |
|  | (1, 1, '05/05/1995', '05/10/1995'), |
|  | (2, 1, '10/10/2010', '10/12/2010'), |
|  | (3, 3, '06/07/2017', '09/07/2017')  Problem 15   |  | | --- | | CREATE DATABASE Hotel | |  | USE Hotel | |  |  | |  | CREATE TABLE Employees ( | |  | Id INT PRIMARY KEY IDENTITY NOT NULL, | |  | FirstName NVARCHAR(50) NOT NULL, | |  | LastName NVARCHAR(50) NOT NULL, | |  | Title NVARCHAR(100), | |  | Notes NVARCHAR(MAX) | |  | ) | |  |  | |  | INSERT INTO Employees (FirstName, LastName) VALUES | |  | ('Michael', 'Jackson'), | |  | ('Michael', 'Jordan'), | |  | ('Michael', 'Keaton') | |  |  | |  | CREATE TABLE Customers ( | |  | AccountNumber INT UNIQUE IDENTITY NOT NULL, | |  | FirstName NVARCHAR(50) NOT NULL, | |  | LastName NVARCHAR(50) NOT NULL, | |  | PhoneNumber INT, | |  | EmergencyName NVARCHAR(100), | |  | EmergencyNumber INT, | |  | Notes NVARCHAR(MAX) | |  | ) | |  |  | |  | INSERT INTO Customers (FirstName, LastName) VALUES | |  | ('Josh', 'Brolin'), | |  | ('Jon', 'Snow'), | |  | ('Jake', 'Gylenhaal') | |  |  | |  | CREATE TABLE RoomStatus ( | |  | RoomStatus NVARCHAR(50) PRIMARY KEY NOT NULL, | |  | Notes NVARCHAR(MAX) | |  | ) | |  |  | |  | INSERT INTO RoomStatus (RoomStatus) VALUES | |  | ('Occupied'), | |  | ('Available'), | |  | ('Cleaning') | |  |  | |  | CREATE TABLE RoomTypes ( | |  | RoomType NVARCHAR(50) PRIMARY KEY NOT NULL, | |  | Notes NVARCHAR(MAX) | |  | ) | |  |  | |  | INSERT INTO RoomTypes (RoomType) VALUES | |  | ('4 person'), | |  | ('2 person'), | |  | ('Boksonierka, brat') | |  |  | |  | CREATE TABLE BedTypes ( | |  | BedType NVARCHAR(50) PRIMARY KEY NOT NULL, | |  | Notes NVARCHAR(MAX) | |  | ) | |  |  | |  | INSERT INTO BedTypes (BedType) VALUES | |  | ('King'), | |  | ('Queen'), | |  | ('Midget') | |  |  | |  | CREATE TABLE Rooms ( | |  | RoomNumber INT PRIMARY KEY IDENTITY NOT NULL, | |  | RoomType NVARCHAR(50) FOREIGN KEY REFERENCES RoomTypes(RoomType), | |  | BedType NVARCHAR(50) FOREIGN KEY REFERENCES BedTypes(BedType), | |  | Rate DECIMAL(6,2), | |  | RoomStatus NVARCHAR(50), | |  | Notes NVARCHAR(MAX) | |  | ) | |  |  | |  | INSERT INTO Rooms (Rate) VALUES | |  | (12.55), | |  | (43.99), | |  | (60.33) | |  |  | |  | CREATE TABLE Payments ( | |  | Id INT PRIMARY KEY IDENTITY NOT NULL, | |  | EmployeeId INT, | |  | PaymentDate DATE, | |  | AccountNumber INT, | |  | FirstDateOccipied DATE, | |  | LastDateOccupied DATE, | |  | TotalDays AS DATEDIFF(DAY, FirstDateOccipied, LastDateOccupied), | |  | AmountCharged DECIMAL(10, 2), | |  | TaxRate DECIMAL(6, 2), | |  | TaxAmount DECIMAL(6, 2), | |  | PaymentTotal DECIMAL(12, 2), | |  | Notes NVARCHAR(MAX) | |  | ) | |  |  | |  | INSERT INTO Payments (EmployeeId, PaymentDate, AmountCharged) VALUES | |  | (1, GETDATE(), 60.25), | |  | (2, GETDATE(), 160.25), | |  | (3, GETDATE(), 460.25) | |  |  | |  | CREATE TABLE Occupancies ( | |  | Id INT PRIMARY KEY IDENTITY NOT NULL, | |  | EmployeeId INT, | |  | DateOccipied DATE, | |  | AccountNumber INT, | |  | RoomNumber INT, | |  | RateApplied DECIMAL(6, 2), | |  | PhoneCharge DECIMAL(10, 2), | |  | Notes NVARCHAR(MAX) | |  | ) | |  |  | |  | INSERT INTO Occupancies (EmployeeId, RateApplied, Notes) VALUES | |  | (1, 55.55, 'enough is enough'), | |  | (2, 15.55, 'now I know how the typewriters feel'), | |  | (3, 35.55, 'these exercises are obsolete') |   Problem 16   |  | | --- | |  | | CREATE DATABASE SoftUni | |  | GO | |  |  | |  | USE SoftUni | |  | GO | |  |  | |  | CREATE TABLE Towns ( | |  | Id INT PRIMARY KEY IDENTITY NOT NULL, | |  | [Name] NVARCHAR(50) | |  | ) | |  |  | |  | CREATE TABLE Addresses ( | |  | Id INT PRIMARY KEY IDENTITY NOT NULL, | |  | AddressText NVARCHAR(100), | |  | TownId INT FOREIGN KEY REFERENCES Towns(Id) | |  | ) | |  |  | |  | CREATE TABLE Departments ( | |  | Id INT PRIMARY KEY IDENTITY NOT NULL, | |  | Name NVARCHAR(50) | |  | ) | |  |  | |  | CREATE TABLE Employees | |  | ( | |  | Id INT PRIMARY KEY IDENTITY NOT NULL, | |  | FirstName NVARCHAR(50), | |  | MiddleName NVARCHAR(50), | |  | LastName NVARCHAR(50), | |  | JobTitle NVARCHAR(35), | |  | DepartmentId INT FOREIGN KEY REFERENCES Departments(Id), | |  | HireDate DATE, | |  | Salary DECIMAL(10,2), | |  | AddressId INT FOREIGN KEY REFERENCES Addresses(Id) | |  | ) | |  |  | |  | --problem 17 | |  | BACKUP DATABASE SoftUni | |  | TO DISK = 'D:\softuni-backup.bak' --location where the backup file will be saved | |  | WITH FORMAT, | |  | MEDIANAME = 'DB Back up', | |  | NAME = 'SoftUni DataBase 2017-09-22'; | |  | GO | |  |  | |  | RESTORE DATABASE SoftUni | |  | FROM DISK = 'D:\softuni-backup.bak' --location of the db on your hard drive | |  | GO | |  |  | |  | --problem 18 | |  | USE SoftUni | |  |  | |  | INSERT INTO Towns ([Name]) VALUES | |  | ('Sofia'), | |  | ('Plovdiv'), | |  | ('Varna'), | |  | ('Burgas') | |  |  | |  | INSERT INTO Departments (Name) VALUES | |  | ('Engineering'), | |  | ('Sales'), | |  | ('Marketing'), | |  | ('Software Development'), | |  | ('Quality Assurance') | |  |  | |  | INSERT INTO Employees (FirstName, MiddleName, LastName, JobTitle, DepartmentId, HireDate, Salary) VALUES | |  | ('Ivan', 'Ivanov', 'Ivanov', '.NET Developer', 4, '2013/01/02', 3500.00), | |  | ('Petar', 'Petrov', 'Petrov', 'Senior Engineer', 1, '2004/02/03', 4000.00), | |  | ('Maria', 'Petrova', 'Ivanova', 'Intern', 5, '2016/28/08', 525.25), | |  | ('Georgi', 'Teziev', 'Ivanov', 'CEO', 2, '2007/09/12', 3000.00), | |  | ('Peter', 'Pan', 'Pan', 'Intern', 3, '2016/28/08', 599.88) | |  | --it's quite possible for the dates to be reversed, e.g. the last one to be 2016/08/28, depends on your PC's settings | |  |  | |
|  | |  | | --- | | --problem 19 | |  | SELECT \* FROM Towns | |  |  | |  | SELECT \* FROM Departments | |  |  | |  | SELECT \* FROM Employees | |  |  | |  | --problem 20 | |  | SELECT \* FROM Towns ORDER BY Name | |  |  | |  | SELECT \* FROM Departments ORDER BY Name | |  |  | |  | SELECT \* FROM Employees ORDER BY Salary DESC --this is order by descending | |  |  | |  | --problem 21 | |  | SELECT Name FROM Towns ORDER BY Name | |  |  | |  | SELECT Name FROM Departments ORDER BY Name | |  |  | |  | SELECT FirstName, LastName, JobTitle, Salary FROM Employees ORDER BY Salary DESC --the listing should be done with a comma | |  |  | |  | --problem 22 | |  | UPDATE Employees | |  | SET Salary += Salary \* 0.1 | |  |  | |  | SELECT Salary FROM Employees | |  |  | |  | --problem 23 | |  | USE Hotel | |  |  | |  | UPDATE Payments | |  | SET TaxRate -= TaxRate \* 0.03 | |  |  | |  | SELECT TaxRate FROM Payments | |  |  | |  | --problem 24 | |  | DELETE FROM Occupancies | |  | SELECT \* FROM Occupancies | |